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BusinessWeek

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SEPTEMBER 2, 1998

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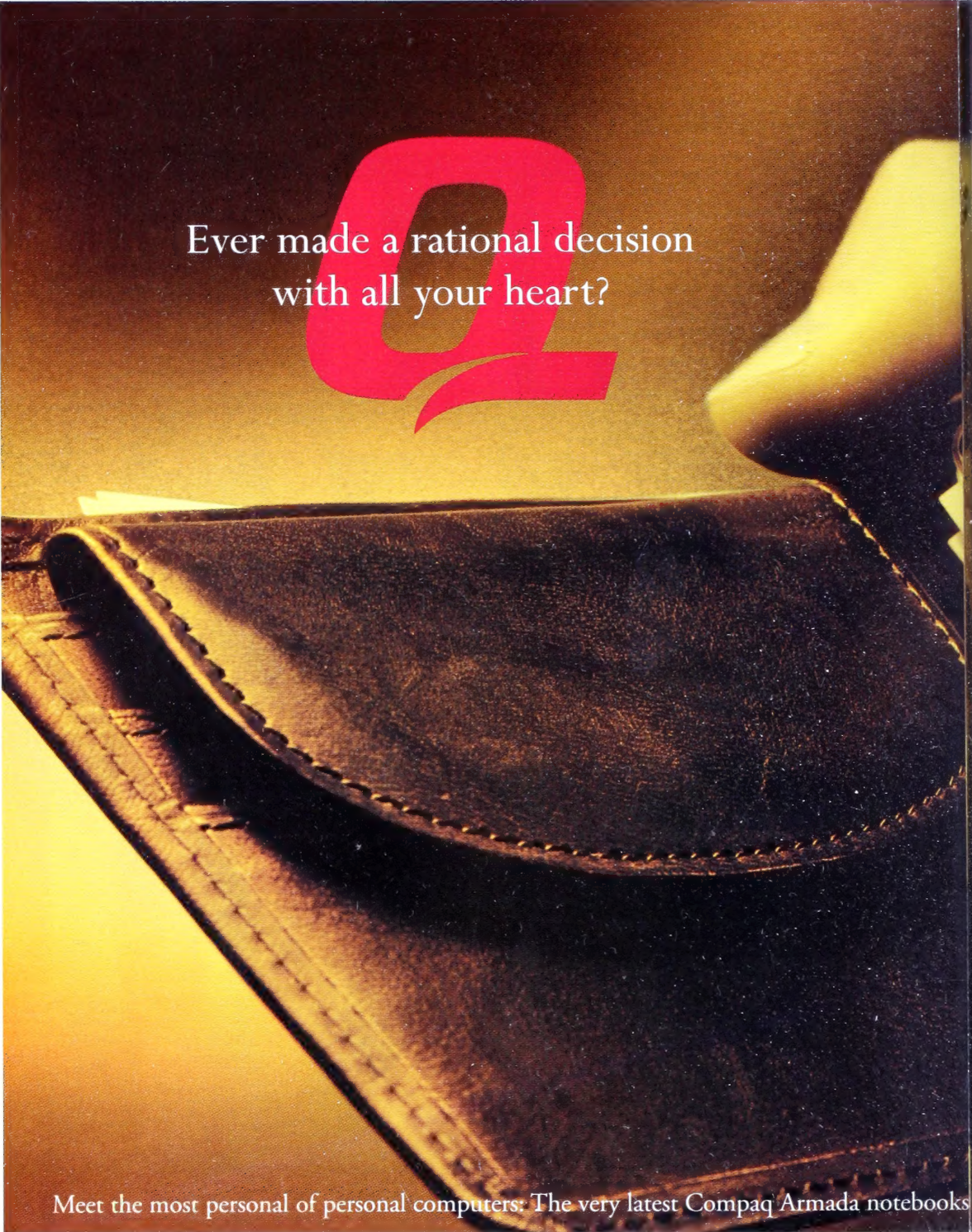
THE INFO TECH 100

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fig. 1

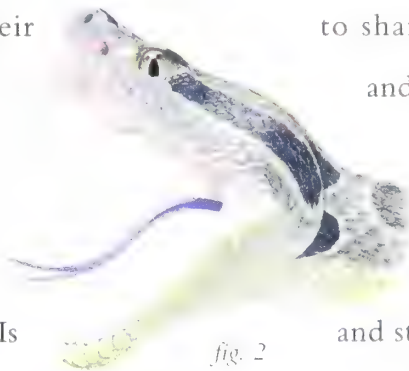


fig. 2

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BusinessWeek

NOVEMBER 2, 1998

COVER STORY

INFO TECH 100
BUSINESS WEEK's
guide to the
companies that are
changing the
industry that is
changing the world

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Cover Story

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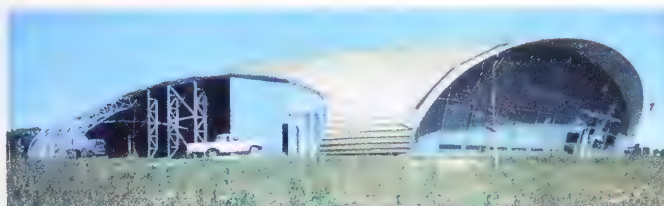
Barro: Malaysia's use of capital while not ideal, is preferable to usual IMF intervention

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ress, Silicon Valley had become the
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d present the results of their
d annual contest for the designers
e best new work environments.
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ationary waste-sorting facility in
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Up Front

EDITED BY JOAN OLECK

SPACE TRAVEL

BED AND BLAST-OFF

JOHN GLENN BLASTS back to space on Oct. 29. And the 77-year-old's heroic mission will surely contribute to what we know about aeronautics, medicine, and gerontology. It also will contribute to the pockets of residents near the Kennedy Space Center. The reason: lodging—or the lack of it.

The Space Coast Office of Tourism expects 250,000 visitors and reports that few vacancies remain among the area's 8,500 hotel rooms and 4,000 campsites. Says assistant director Bonnie King: "We're looking at 100% occupancy throughout the coun-



GLENN: "A hero"

ty. We're smiling. We're having a good time."

Private homes are renting spare bedrooms. Joan Grimes has three bidders for a room in her Cape Canaveral townhouse. Price: \$150 a night, but Grimes says she's mostly interested in finding the right visitors to share the launch with. Still, not everyone is cashing in: Albert

Cleveland, a retired NASA manager with a four-bedroom Cocoa Beach home, will welcome out-of-towners who find themselves stranded. "I believe in the space program," he explains. "John Glenn is a great hero." Apparently, First Tourist Bill Clinton agrees: He's scheduled to view the launch—but not to stay the night. *Robert Barker*

BUSINESS SPEAK

CALLING ALL RACONTEURS

ONCE UPON A TIME, TWO communications consultants decided CEOs could take a cue from kids and storytime: A good yarn packs more punch



than a pie chart. Peter Giuliano and Frank Carillo of Executive Communications Group in Englewood, N.J., are testing their theory with daylong executive storytelling seminars at \$395 a pop. The first, in New York,

attracted 25 representatives from the Federal Reserve Board, Deloitte & Touche, and Revlon, among others.

At the New York seminar, participants first examined the basics of Aristotelian rhetoric (ethos, pathos, and logos), then honed their own narratives into pithy business tools. The point? "Stories are the best way to make someone feel and remember what you're talking about," says Giuliano in his deep bass voice.

One participant humorously recounted lessons he learned as a high school rabble-rouser. Another spoke of her frustration tackling the Y2K problem. These fledgling storytellers illustrated Giuliano's belief that emotion is the best way to grab your audience. Reason enough to ditch those overhead transparencies and start your next meeting with a good fable. *Dennis Berman*

TALK SHOW "I'm a person touched by God."

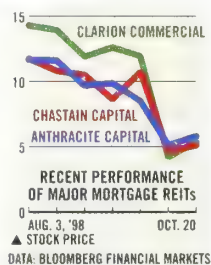
—Home-run slugger Sammy Sosa to thousands of fans assembled for his homecoming to the Dominican Republic

REALTY CHECK

NOTHING SWEET ABOUT THESE REITs

THE MARKET FOR COMMERCIAL real estate investment trusts has already taken its lumps. Now, it looks like things will get worse before they get better for the riskiest funds. As investors have backed off from REITs, the hardest hit have been funds investing in securities backed by mortgages that don't carry government guarantees.

The most severely punished so far has been Criedmi Mae, a nongovernment-affiliated REIT that held some of the riskiest mortgage-backed securities and filed for Chapter 11 on Oct. 5. "We haven't seen a situation this unsettled in 20 years," says



Hugh Frater, CEO of another mortgage REIT, Anthracite Capital, and Clarion Commercial are among REITs whose stocks have dropped 50% or so in price since early August. Frater has been trying to persuade lenders to be patient. Mae went into Chapter 11 after its lenders cracked

But lenders' patience may be wearing, especially with the \$30 billion of commercial mortgage-backed securities waiting to be sold in the market. "People are reluctant to buy bonds when they know they'll be charged next week," says Greg V. vice-president of asset management firm Conning. Only a sharp turn in market sentiment can head off a collision. *Andrew Oster*

THE LIST ALL THEY WANT FOR CHRISTMAS

Are you secretly terrified of bombing out when you select your little one's holiday toy this year?

Consider this "Top 10" survey, which "play-tested" 26 expert-recommended toys and games among 516 kids, ages 4 to 11, in 22 cities. The tykes' No. 1 pick? A remote-control operated construction set. Now, how many shopping days did we say were left 'til Christmas?

1. POWER CHUTES—BASIC START (ROKENBOK TOY)
2. BRAIN SHIFT (TIGER ELECTRONICS)
3. LEGO EXTREME TEAM CHALLENGE* (LEGO SYSTEMS)



DEAR SANTA... Power Chutes

4. HYDRO (PRESSMAN)
5. KOOSH CATCHERS* (ODDZON)
6. TURBO Z (SILVERLIT TOYS)
7. FISHIN' AROUND (MILTON BRADLEY)
8. PUPPY RACERS* (PARKER BROTHERS)
9. GAME CENTER JR.* (PLAYHUT)
10. MATH & MAGIC (CHICCO USA)

* Not battery-operated

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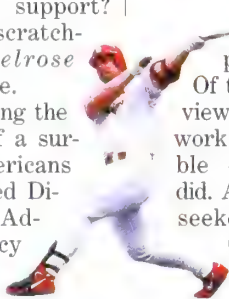


WHITE HOUSE FOLLIES

LIKE TIDE, DON'T LIKE BILL CLINTON

TV'S TOUCHED BY AN ANGEL viewers aren't the forgiving folks we had imagined: Asked their views on Bill Clinton in the midst of his sex scandal, only 8% gave him a thumbs-up. Where does our our President find strong support? Try viewers of scratch-her-eyes-out *Melrose Place*: 89% positive.

These were among the oddball findings of a survey of 1,200 Americans by New York-based DiMassimo Brand Advertising. Agency President Mark DiMassimo claims links be-



McGWIRE: HEROIC

tween the White House scandal and media choices, hero worship, and brand loyalty. A sampling: For people calling themselves loyal to brands—laundry to lipstick—only 18% supported Clinton. Of those who have been “disappointed” in one or more brands, 74% were positive. Explains DiMassimo: “They [the disappointed] tend to react less emotionally to bad news about Clinton because they’ve been hurt before.”

Another finding: The media-barraged react less to emotionally charged news. Of those people who view diverse media—lots of cable and network plus the Inter-

net—only 6% supported impeachment. Of the media-selective—viewing perhaps one network channel and one cable channel—fully 51% did. And what about hero-seekers? Of Mark McGwire fans, 69% supported impeachment, vs. 32% of all Americans. □

AFTERLIVES

THE WRONG KIND OF PINSTripES

“A COUPLE OF NEAT EMBEZZLERS and bank fraud guys” is the way accounting prof Richard Davis describes two former lawyers. So why are they guest lecturers before his undergraduate business law class? To scare his students straight. In fact, this was the third year in a row the Susquehanna University professor has recruited two businessmen-gone-bad.

Roger Cohen and Fred Dellorfano are each serving nine-plus years for bank fraud, money laundering, racketeering, and conspiracy. “It starts small,” says Dellor-



fano, speaking by phone from the Allenwood Federal Prison Camp in Montgomery, Pa. “A favor here, a favor there. Suddenly the whole thing can topple on your head.” Although he concedes that “just getting a day out is a nice break from the routine,” he claims noble motives: “Even if we stop only one or two people from stepping over the line, we’ve done something.”

Davis agrees, and students at the eastern Pennsylvania school are riveted, he says. “What really grabs them is that these

guys had everything the students dream of obtaining. Now, they have nothing.” That’s not entirely true: The two criminals actually have a tour list. Next stop: Penn State. Jeanette Brown

DRAWN & QUARTERED



UH-OH, CANADA

WILL SURGERY FIX THIS BRAIN DRAIN?

TITANIC DIRECTOR JAMES Cameron and ABC news anchor Peter Jennings are part of a fast-growing trend: Canadians who exit their homeland for opportunities in the U.S. Although Canadians have long grouched that the departees are among the best and brightest, no one has quantified the brain drain. Until now.

A study for the C.D. Howe Institute, a Toronto think tank, calculates that Canada lost over 31,000 professionals and managers from 1990 to 1996. That outflow, though just a sliver of Canada’s 30 million population, meant a 14% to 40% loss of the managers, doctors,

scientists, and nurses graduating from professional schools in 1991 alone. Including in subsidies to higher education, those Class of 1991 departures cost Canadians \$423 million. The loss from 1982 to ’96 exceeds \$4 billion. With income-tax rates as high as 50% and sluggish creation, it’s clear why



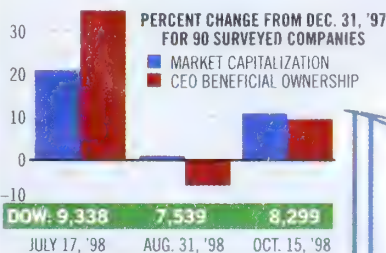
GONE SOUTH: Cameron and Jennings aren’t looking back.

Canadians leave. But what’s to be done? Seeing political-making potential, the Reform Party, the official opposition in Parliament, has a suggestion: End “punitive high” taxes. Joseph

THE BIG PICTURE

CEOs ARE ON A WHITE-KNUCKLE RIDE, TOO

About half of CEO pay, on average, is distributed in the form of options or restricted stock. A survey of CEOs of 90 large companies shows the recent resulting wild ride on the market.



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THREE
STRAIGHT YEARS

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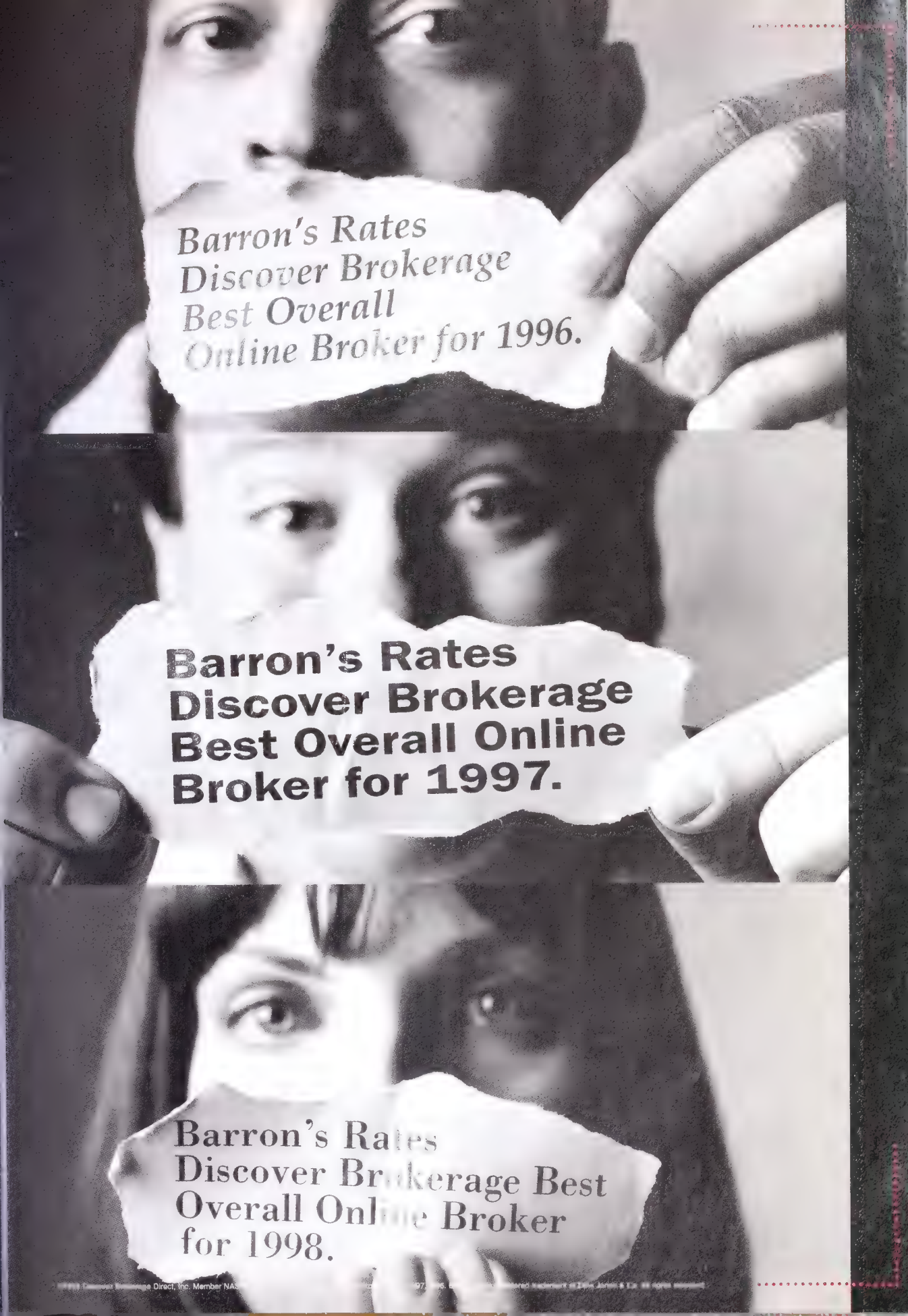
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EDITOR'S MEMO

HIGH TECH'S HOTTEST 100

When BUSINESS WEEK became the first general business magazine to cover computers on a regular basis nearly 20 years ago, we called the section Information Processing. It was a punch-card world in those days, with computers that took up a whole floor. We now live in a fiber-optic digital world and call our section Information Technology—a recognition that a far broader constellation of telecommunications, networking, and wireless wonders have taken shape around the computer.

This week we offer a new barometer of this critical industry. The Information Technology 100 provides a freeze-frame of an industry that seems to be perpetually on fast forward. By breaking the industry down into eight discrete segments and then ranking the companies on growth, profitability, and shareholder return, we present a glimpse of

the companies that are prospering or suffering. Just as important, we put those companies in the context of the global business trends that are buffeting or billowing the sails of particular segments of the industry around the world.

You'll find some familiar names on the list: Dell Computer, Hewlett-Packard, IBM, Microsoft. But you'll also find some unfamiliar ones: Vodafone, Ingram Micro, MindSpring.

If you're looking for clues on when to spot the next immutable force driving the industry that accounts for some 30% of the growth in the U.S. economy, the Information Technology 100 is a good place to start. Happy hunting.

Stephen B. Shepard

Editor-in-chief

SHOULD THIS HEDGE FUND HAVE BEEN SAVED?

I was amused to read the last paragraph of "The rescue: What you need to know" (News: Analysis & Commentary, Oct. 12), regarding the fate of Long-Term Capital Management (LTCM) and its partners. That paragraph describes the possibility of personal financial losses on the part of the partners as a "vicious punishment."

Each time a business fails, business owners who manufacture or offer real products or services suffer punishments as "vicious" as or worse than those meted out to the LTCM partners. The real economy sentences hundreds of

thousands of business owners to vicious punishment each year. The existence of the LTCM bailout proves that among the financial elite, capitalism isn't understood or accepted (at least for the rich). Instead of worrying over punishing a few dollars, the LTCM partners should thank their lucky stars that traditional punishment for bad behavior was abolished at the founding of the republic: debtor's prison.

Richard S. Al
Albuquerque

All the articles I have read on the LTCM bailout suggest that the brilliant managers went too far and were irresponsible in using their

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average. Perhaps. But isn't it also possible that they were astoundingly competent in their use of leveraging to protect against total failure? It seems to me that if I managed a fund and I was nervous about making risky bets on other people's billions, it would be difficult to find a way to buy insurance against potential loss, no matter how remote that possibility might seem. I don't have to be a rocket scientist to recognize that the bigger I become (financially speaking), the less likely it is that the U.S. financial community will allow me to fail. Therefore, it doesn't seem that borrowing excessively will be a smart way to bulk up for a financial bailout. Is it possible that our government's policies encourage the creation of financial monsters?

Gino J. Coviello
Palm Coast, Fla.

FINANCING STRATEGY STIMULATING JAPAN

"Talk with Treasury Chief Rubin" (Financial Report, Oct. 12) closes with Treasury Secretary Rubin's view that all should contribute to stimulating Japan's economic growth. Just as it is a known fact to print money to fuel ongoing inflation, it could be wisdom to print money to check ongoing deflation. Perhaps the most reliable way to get printed money into circulation would be to deposit it to the credit of the troubled Asian economies with the proviso that the deposits only be drawn to pay for imports of Japanese goods or services, thereby stimulating production and employment in Japan and the countries benefiting from the aid. This financing device could encourage much larger aid programs than might otherwise be provided. Of course, the Japanese banking problem also needs to be addressed. However, as the pileup of unused lending capacity in the U.S. banking system in the 1930s demonstrated, ample availability will not induce people to borrow and spend, unless they feel optimistic about their future and see good uses for the money.

Jetson E. Lincoln
Montclair, N.J.

PRICING STOCK OPTIONS: WHO WHO LOSES?

Read with great concern "How to avoid failure: Reprice stock options" (Analysis & Commentary, Oct. 12) and "Wall Street's soft dollars: Only time will do" (Finance, Oct. 12). The topics covered there and the number of extremely high salaries and bonuses for top management of public compa-

nies today make me wonder what an individual investor can do.

I have a retirement portfolio made up of 92 stocks and mutual funds plus fixed-income investments, and I feel that I am at the mercy of highly paid Wall Street players. As a stockholder, I vote each opportunity I have concerning officers and proposals, but I do not feel that my vote—or any individual investor's vote—has any effect. I continue to read of corporate management taking advantage of us, and I am frus-

trated. Do we need an association of individual investors to fight our battles? How do we get a say?

Hamilton O. Beardsley
La Mesa, Calif.

The example of repricing stock options for Cendant Corp.'s chief executive seems to be a reward for failure. But Cognex and the vast majority of companies that I know of reprice employee stock options carefully with the clear objective of attracting, moti-

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CORRECTIONS & CLARIFICATIONS

The volume of mergers and acquisitions was misstated in "Hey, things were tough all over" (The Corporation, Oct. 19). The total of deals announced through the end of September was \$1.3 trillion, and September's volume was about \$45 billion.

Credit for "The List: They're sending you where?" (UpFront, Oct. 5) was inadvertently omitted. The source was Windham International.

vating, and retaining key talent.

In many cases, a stock price suffers because of uncontrollable global events. Cognex's stock price—along with many other high-tech stocks—has plummeted to a fraction of its 52-week high because of the recent global downturn in the semiconductor capital-equipment industry and because of the Asian financial crisis. As a result, stock options held by our employees who have a \$36 exercise price are underwater and no longer serve to motivate them to work hard and stay on until events improve.

Instead, those employees can readily find employment elsewhere, where they will get new stock options having an exercise price at the current market value. And any new employees we hire to fill those vacancies would, of course, get new Cognex options at today's market price. If we are willing to give new options at the current market price to new employees, then why not save all the effort of hiring new people and simply retain the current employees by repricing their underwater options?

Robert J. Shillman
President and CEO
Cognex
Natick, Mass.

The repricing of options is obviously an affront to the concept of pay for performance, the theory under which wildly excessive executive largesse is sold. The whole concept of compensation via options should be revisited. Options may not even align the incentives of the executive with those of other stockholders, since an executive with a large number of underwater options has a great incentive to bet the farm on a risky but potentially profitable venture. Instead of options, why not grant stock at market prices, in which the executive is not vested for a specific period of time (or until separation)?

I cannot do much as an individual stockholder, but until there is more

transparency and stockholder protection in executive compensation, I will always vote my proxies against provisions for executive options.

David Hunt
Roanoke, Vir.

POOLING OF INTEREST IS CRUCIAL FOR HIGH TECH

I applaud BUSINESS WEEK for exposing how accounting abuses mislead stockholders ("Earnings hocus-pocus," Cover Story, Oct. 5). Certainly, many of the practices cited, such as arbitrarily assigned and accelerated depreciation of R&D expenses, allow artificial short-term increases in earnings.

However, "pooling-of-interest" accounting practices should not be viewed in the same way. Pooling of interest enables high-tech mergers, especially for software companies. This is because the relative asset value of software companies is small compared with that of industrial manufacturers, which have a large capital base of production facilities. Without pooling of interest, acquiring software companies would incur large "goodwill" asset categories. The amortization of this goodwill would artificially reduce earnings for years, causing an unacceptable loss of shareholder value.

The key point is that software companies' asset value is primarily determined by the cost of development. Those costs are capitalized and amortized over the anticipated life of the product. This sort of "replacement cost" approach does not take into account the expertise of the software development team that makes the products. These "people assets" are what count most for a software company's success and are not reflected on the balance sheet.

Eliminating pooling-of-interest accounting, therefore, would prohibit many strategically important acquisitions and reduce shareholder return.

David M. Burwen
Managing Partner
Venture Development Group
Mountain View, Calif.

DOUBT ABOUT A FAT DRUG IS ON THIN GROUND

I believe that "The new fracas over fat pills" (Science & Technology, Sept. 28), which highlights unpublished experimental studies by Dr. Richard J. Wurtman and his colleagues, may have unnecessarily created false impressions and fears among readers.

There is a serious question about Wurtman's attempt to conclude from a

1970s published study that phentermine inhibits monoamine oxidase (MAO) doses used in that study—not performed on humans—were far above approved amounts taken by patients using phentermine. Given this fact, the relevance of this study to phentermine users is questionable. Thus, despite the content of your article, the data do not support Wurtman's hypothesis that phentermine should be labeled an MAO inhibitor.

It is important for readers to understand that fenfluramine and dexfenfluramine were pulled from the market because of associations with heart and lung problems; phentermine remains available for use as a Food & Drug Administration-approved anti-obesity drug.

Benedict R. Luc
Professor of Pharmacology
Univ. of Michigan Medical School
Ann Arbor, Mich.

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COMPETING ON INTERNET TIME

Lessons from Netscape and Its Battle with Microsoft

By Michael A. Cusumano and David B. Yoffie

Free Press • 361pp • \$25

A BOOK AT THE CENTER OF THE MICROSOFT CASE

A willingness to admit mistakes is one of the most impressive attributes of Silicon Valley entrepreneurs. In this bustling laboratory of business experimentation, a blunder is something to be learned from, not to be ashamed of. What's more, executives here discuss such missteps—as well as brilliant maneuvers—with reporters and college professors, allowing everything to get dissected. High-tech execs are the lab mice of Silicon Valley.

Such was the genesis of *Competing on Internet Time: Lessons from Netscape and Its Battle with Microsoft*, a book by Massachusetts Institute of Technology management professor Michael A. Cusumano and Harvard business school prof David B. Yoffie. The book made news when Microsoft Corp. tried unsuccessfully to get its hands on the authors' interview tapes and transcripts for its defense against the government's antitrust suit. In the suit, the feds accuse Microsoft of illegally attacking Netscape as the two fought for the Internet-browser-software market.

Microsoft wanted to use the professors' research during the trial to try to prove that its own improving products and Netscape's blunders—not anything Microsoft did wrong—drove the Internet pioneer's browser market share from 80% two years ago to about 42% today. Microsoft had already landed a manuscript copy of the book when it subpoenaed Netscape documents for the antitrust case. But its attempt to obtain supporting materials was successfully opposed in court by MIT and Harvard, which said it threatened the academic-research process.

The book was rushed into print to coincide with the Oct. 19 start of the trial. But it is a marvelously detailed account and analysis of Netscape's rocket-launch rise and mid-flight corrections.

Cusumano and Yoffie spent more than a year doing dozens of interviews with executives and engineers at Netscape, Microsoft, and other technology companies. They got unprecedented access within Netscape, and their book owes most of its charm to the candor they encountered there. Netscape Executive Vice-President Marc Andreessen, for instance, admits he missed the importance of turning the company's corporate Web site into a general-purpose portal for both consumers and business people. He told the authors: "I absolutely thought we were a software company—we build software and put it in boxes, and we sell it. Oops. Wrong." Engineer Michael Toy is brutally honest about flaws in Netscape's Communicator 4.0 browser, which was released in mid-1997. "This code should have been taken out and shot," Toy says.

While excerpts from the book may harm Netscape's already fragile reputation, the book isn't likely to play a decisive role in court. One comes away from this book with a healthy respect for Netscape executives and engineers. They made mistakes. But they operated in a maelstrom, so it's no wonder that they sometimes didn't plan well and some of their products had quality problems. Cusumano and Yoffie admire Netscape's leaders for spotting opportunities, shifting strategies deftly, learning quickly from goofs, and building a \$500 million company in four years. Bottom line: "We believe that Netscape has transformed itself...into a company that can survive and potentially thrive, despite competition from Microsoft and IBM—to name just two determined opponents."

In fact, the Justice Dept. may find

more to like here than Microsoft. The book notes that Netscape browsers began losing 1% of market share per month after Microsoft introduced its Internet Explorer 3.0 browser in August 1996. Reviewers ranked two companies' products about even, a reader may infer that it was Microsoft's free bundling of the browser with Windows and its monopoly-influence over PC makers that chipped away at Netscape's lead—just as Justice alleges. Late in the book, the authors deliver their verdict on Microsoft's behavior—and it's thumbs down. "The company was too greedy and too tough when it came to winning market share in the browser wars," they write.

That's the only time Yoffie and Cusumano take sides in the computer industry's religious war. Most of the book is a business-school analysis of Netscape's performance. The authors conclude that, indeed, the Internet has changed the rules for many businesses,

requiring them to move very quickly and take extreme risks. But at the same time, they must continue to place a high value on strategic planning and product quality.

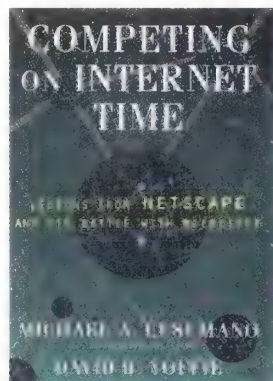
Most interesting is the authors' application of a judo metaphor to Netscape's early face-off with Microsoft. Netscape was able to use the larger company's strength against it by adopting

open technology standards and developing products for a whole range of operating systems, not just Microsoft Windows. It wasn't until Netscape entered the sumo wrestling—matching strength against strength—that its strategy began to fail.

Now Netscape has learned from those mistakes and is focusing on niche tests where there isn't just one winner. It's also less willing to admit its mistakes to prying authors. And Microsoft turns out sumo wrestling wasn't the greatest for the software giant, either. In a Washington (D.C.) courtroom now, paying the price for throwing weight around.

BY STEVE HAMM

Hamm covers the software industry from Silicon Valley.



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HOT TYPE

AT MY FIRST JOB, ONE UNDERWORKED REPORTER used to leave "while you were out" message slips on co-workers' chairs, telling them to "call Mr. Lyon." When they dialed the number given, they would find that they'd telephoned the city zoo. Big yucks.

A bit of Scott Adams' *The Joy of Work*, No. 15 on this month's hardcover list, is given over to such sophomoric pranks, most E-mailed by Adams' fans. Maybe that's to be expected when the book's subtitle is *Dilbert's Guide to Finding Happiness at the Expense of Your Co-workers*.

But don't despair. Adams hasn't given up entirely on striking back against downsizing-minded, management-fad-addicted execs. Sections on "Managing Your Boss" and "Reverse

Telecommuting" (i.e., bringing your personal work to the office as fresh as those of the first Dilbert management tip sheet, *The Dilbert Principle*. Particularly handy are Adams' tips on "multishirking"—doing two nonwork-related activities simultaneously to give the impression that you're slaving away.

Near the book's end, Adams offers a fascinating "formula for creating humor." In essence, he says, all humor combines at least two of the following six factors: cuteness, meanness, bizarreness, recognizability, naughtiness, and earnestness. He then supplies several Dilbert strips to illustrate how these combinations provoke laughter. It's cute and clever—just ask Mr. Lyon.

BY HARDY GREGG

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a limit on
what can be
accomplished."**

- Christopher Reeve
Vice Chairman of N.O.D.

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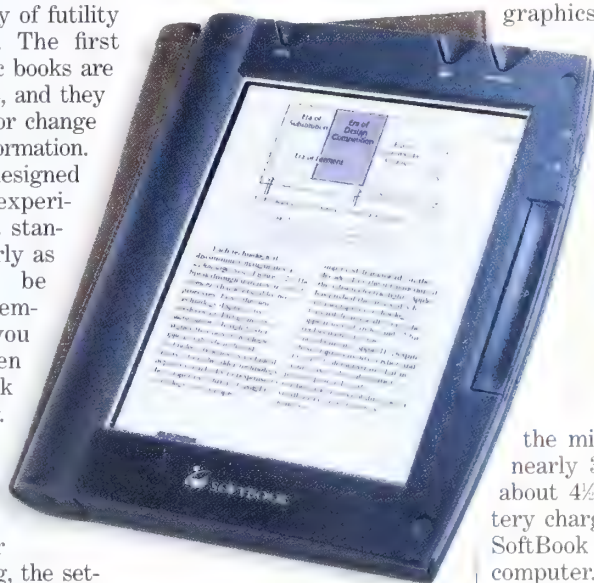
STEPHEN H. WILDSTROM

NEW CHAPTER OR E-BOOKS

er many false
rts, practical
ital readers are
ing the market

In 1945, Presidential science adviser Vannevar Bush designed a desk-sized device called Memex, originally regarded as the electronic book. Memex got off the drawing board, making Bush the first in a long line of electronic Gutenbergs. There's a good chance a half-century of futility about to end. The first practical electronic books are hitting the market, and they mark a major change in how we get information. Now E-books, designed to simulate the experience of reading a standard book as nearly as possible, should be available in November. Of course, you've always been able to read a book on a computer. A few people and most of them don't get out any longer a page or two. For one thing, the setup required for typing, even on a laptop, puts the screen far away for reading. So, every time you hit "page down" key, your neck has to search to find the page you stopped reading, a process that literally gives you people headaches. The SoftBook from SoftBook Press (650 463-1800) and the RocketBook from NuvoMedia (650 327-5110) are great in design and

content, but they have important things in common. They are basically flat tablets that you hold, and read, just like a book. A simple rocker switch lets you move cleanly forward or back one page, without scrolling. You can use a stylus on the touch-sensitive screen to leave book-marks and make notes in the margins. With a minimum of other simple controls, you select a book from the library stored on the unit, change basic settings, adjust type size, and control downloads.



SOFTBOOK: A reference library in a portable package

The \$499 RocketBook is designed as a sort of electronic paperback. The 1.4-lb. reader is about the size and thickness of the latest Grisham and displays pages of text on a 4½ in. by 3 in. monochrome screen. It's light enough and bright enough to read in bed. And though the

type is nowhere near as sharp as even a cheap paperback, I found it acceptable for extended reading.

To load a book into the RocketBook (and also to recharge the batteries, which are good for about 17 hours of reading), you put the reader into a cradle that's attached to a Windows PC. You then purchase a book from an online bookstore—barnesandnoble.com has already signed on—and download the text from the Web. Random House and St. Martin's Press will be among the publishers making titles available.

While NuvoMedia is going after the mass market paperback, SoftBook sees its future as a supplier of technical and professional information. SoftBook is bigger, with an 8 in. by 6 in. screen, so it has bigger type. It also displays graphics more clearly. On

recreational reading, too, SoftBook also plans to offer what CEO James Sachs calls "an airport bookstore" of popular titles with a far narrower selection than RocketBook.

Other companies plan to bring out digital books next year, but I think SoftBook's approach is the most promising. Except for the ability to create instant large-print books, useful to readers with vision problems, RocketBook offers few advantages over an ordinary book—and titles may not be much cheaper than discounted paperbacks.

WEIGHT LOSS. SoftBook shows promise because its success won't depend on being better or cheaper than paperbacks. It is designed to replace the stacks of reference material and manuals that professionals and technicians now cram into attaché cases. Its large format and subscription model would work well

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Infinite	BATTERY LIFE	4 to 18 hours
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1 to 10 lb.	WEIGHT	1.4 to 3 lb.
Nonexistent to photo-quality	ILLUSTRATIONS	Fuzzy line drawings at best
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the minus side, it weighs nearly 3 lb. and gets only about 4½ hours from a battery charge. Most important, SoftBook does not require a computer. It uses a built-in modem to fetch text from SoftBook servers, which will offer both publicly available texts such as Westlaw legal publications and private libraries of specific corporate information, such as manuals or training materials.

SoftBook will cost \$299 if a buyer commits to spending \$20 a month on E-books or \$599 for an outright purchase. Because market testing indicated that customers want

for electronic periodicals. Ultimately, it could replace the 20 lb. or so of textbooks that students lug in backpacks.

These new E-books show typical defects of first-generation products. They're too expensive and too heavy. The displays can't rival print on paper. Battery life, particularly SoftBook's, is too short. But if history is any guide, better, lighter, and cheaper machines will come along.

I love books, and electronic versions won't replace print in my heart or on my overflowing bookshelves. But I see a place for E-books—and it could be a big one.



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BY GENE KORETZ

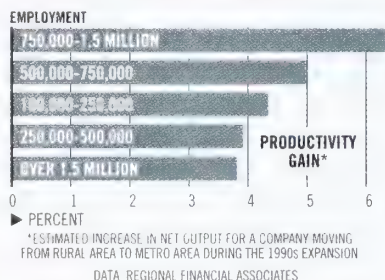
BRIGHT LIGHTS, MIDSIZE CITY

What towns are best for business?

Are cities obsolete? According to economic theory, cities will grow as long as the economic benefits from "agglomeration"—access to goods, services, workers, knowledge, and markets—exceed such negatives as higher taxes and living costs, pollution, congestion, crime, and limited space to expand.

Some experts argue that advances in information technology, by making it

THE BUSINESS PAYOFF FROM A CITY'S SIZE



possible for people to live and work in less populated areas, have changed this trade-off in ways that hurt cities. Others, such as Harvard University economist Edward Glaeser, note that recent trends belie this thesis. The share of the U.S. population living in metro areas with more than 1 million people, for example, rose from 41% in 1970, to 48.1% in 1990.

One thing that advances in information technology do appear to be changing, however, says economist Toni Horst of Regional Financial Associates of West Chester, Pa., is the size of cities that offer the most growth potential to businesses. On the one hand, she notes, innovations in communications technology have allowed many companies in large cities to relocate back-office operations to low-cost semirural sites. On the other, the need for specialized expertise in an increasingly global and information-based economy has increased the appeal of urban locations.

With all their problems, observes Horst, cities still seem best able to provide business with access to skilled workers, specialized high-value services, and the kind of innovation and learning growth that is facilitated by close con-

tact between diverse individuals. The big question is, what size cities are best able to achieve such aims?

To find out, Horst used econometric techniques to estimate how sizes of metro areas affected business productivity in two periods: the 1980s and the 1990s (through 1995). In the 1980s, she found that the greatest benefits accrued to businesses located in cities with over 1.5 million workers. But in the 1990s, larger cities were at the bottom of the heap. That is, other things being equal, they provided the smallest net output gain to businesses moving from rural areas to metro areas.

By far the biggest productivity gains, Horst reports, were racked up by metro areas with employment of 750,000 to 1.5 million (chart). Last year, there were 25 such cities in the U.S., including hot spots like Denver; Milwaukee; Portland, Ore.; San Jose, Calif.; and Seattle. Two measures of the appeal of metro areas in this range are that they boast the highest number of patents per 1,000 households, and the fastest growth in professional-service employment.

None of this implies that really big cities will stop growing, only that most are likely to grow more slowly in the years ahead than smaller urban areas. Meanwhile, notes Horst, several cities such as Fort Worth, Salt Lake City, and Charlotte (N.C.), are poised to grow into the size range offering the largest productivity gains to business.

DO LAYOFFS BOOST CEOs' PAY?

Only at first glance, a study finds

It's an old story, and a troubling one. Companies with highly paid chief executive officers lay off thousands of workers, reap nice gains in their stock prices, and reward their CEOs with big pay increases the following year. But it just doesn't hold up to analysis, reports Kevin F. Hallock of the University of Illinois at Urbana-Champaign.

In a study in the current issue of the *American Economic Review*, Hallock analyzed the compensation of some 550 of America's highest paid CEOs from 1989 to 1995. As many critics have noted, he did find that those in companies announcing layoffs in one year enjoyed far higher pay increases in the following year than their peers in other companies. But it turned out that this apparent connection was mainly due to their companies' size.

Larger companies, the analysis

showed, not only paid their CEOs most, but also tended to give them largest pay hikes in percentage terms. And the largest companies also were the most likely to announce layoffs.

In fact, once he adjusted the data to reflect the effect of a company's size on the probability of layoffs, Hallock found that the apparent gain a CEO might get from a layoff program fell sharply. Once he factored other variables into the pay equation, including a CEO's age and tenure, he found no relationship at all between layoffs and subsequent pay hikes. Indeed, layoff announcements tended on average to slightly depress a company's stock price.

In a nutshell, says Hallock, "the idea that CEOs have gained financially from layoff decisions just isn't supported by the evidence."

A POSITIVE STEP FOR SICK ASIA

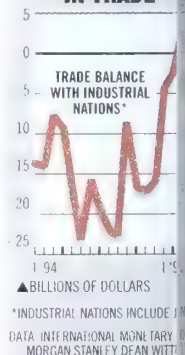
Exports to the West have surged

It may not last, but International Monetary Fund data for the first quarter of 1998 indicate that Asia's developing nations posted their first trade surplus with the industrialized world since 1990. The turnaround reflects a surge in Asian exports and a plunging in imports that produced a \$40 billion swing in the two groups' trade balance in the space of a single year.

Economist Joseph Quinlan of Morgan Stanley Dean Witter sees the trade gain as a first step in restoring international confidence in the region and placing it on the road to recovery. Other recent positive developments include a firming of many Asian currencies, moderating inflation rates, and a decline in interest rates.

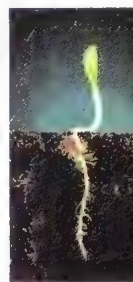
Still, Quinlan notes, the region remains stuck in an economic quagmire. Thus far, its trade improvement is being driven mainly by the strength of U.S. import demand, and a smaller pickup in exports to Europe. The odd man out in the recovery team is Japan, whose appetite for imports from its Asian neighbors continues to lag badly.

ASIA'S U-TURN IN TRADE





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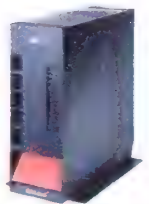
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BY ROBERT J. BARRO

MALAYSIA COULD DO WORSE THAN THIS ECONOMIC PLAN



DESPERATE:
Capital controls, while not ideal, are preferable to the IMF's customary fix of intervention with high interest rates

On my arrival in Malaysia last week, I had two quick impressions. The first came when I filled out a form requiring me to reveal my holdings of U.S. dollars. The capital controls represented by this requirement seemed inconsistent with a dynamic, market-oriented economy. The second was that I was amazed by the splendor and size of the newly opened airport, which seemed totally out of proportion to the volume of business going on at the time.

Both observations relate to the ongoing financial crisis. Malaysia's capital controls are a desperate response to the devaluation of the ringgit. The overly expensive airport epitomizes the pervasive excess of investment in infrastructure and buildings. The writing down of these projects, along with a scaling back of the country's long-term growth prospects, were major factors in the collapse of Malaysian stock prices and the onset of recession months ago.

Many economists are outraged by Malaysia's adoption of capital controls. Their reaction would be less harsh if not for the country's outstanding record of market-oriented policies. After all, it is easier to accept bad behavior from an established scoundrel than from one's friend or hero.

WESTERN ENEMIES. One element that makes it difficult to sympathize with Malaysia's policy change is the defense offered by the Prime Minister and now also finance minister, Mahathir Mohamad, who blames his nation's troubles on greedy speculators and Westerners with poor values. He also invites disdain because of the imprisonment and torture of his political rival and former finance minister, Anwar Ibrahim, who was opposed to capital controls.

But, counter to my initial instincts, there is some logic behind the capital controls. The Malaysian ringgit has been floating for some time, and one desirable consequence of this policy is that the central bank's reserves have been maintained. However, the volatility and downward trend of the exchange rate have been harmful to the economy. Hence, policymakers reasonably decided that some kind of fixing of the rate would be desirable. They also determined—I would say correctly—that the usual defense of the exchange rate with central-bank interventions that feature high interest rates would fail. As with Thailand in 1997 and Mexico in

1994 (and perhaps now with Brazil in 1998), this policy would probably lead to the loss of international reserves, which would curtail the central bank's ability to intervene in any case in devaluation.

The basic problem is that central banks typically react to an attack on the domestic currency through a process called sterilized intervention. The central bank meets the demands for foreign currency by selling its international reserves, mostly dollars, and uses the proceeds to buy the domestic currency. In this case ringgits. However, the bank does not allow the domestic money stock to decline. Instead, the bank buys domestic assets, such as government bonds, for ringgits, thereby injecting money back into the system.

CORRECT ACTIONS. This approach looks attractive because it does not expose the economy to the contractionary effect of a decline in the money stock. Unfortunately, the kinds of interventions usually do not end the run on a currency. In the end, the central bank tends to lose more and more reserves and is ultimately forced to devalue. The intervention would work a lot better if the central bank did not sterilize and allowed the money stock to decline.

The Malaysians are probably right to reject the usual policy sanctioned by the International Monetary Fund of sterilized intervention coupled with high interest rates, which would be worse than capital controls in the present environment. This is especially true if the controls are temporary. Capital controls would be superior to policies recommended by the IMF, but they are far from ideal. The alternative policy would entail a fixed exchange rate without capital controls, with the central bank intervening but not sterilizing.

One attraction of a currency board is that these kinds of interventions occur automatically when needed. Moreover, correct actions do not require any deep economic understanding by the board's administrators. However, a clever central bank can mimic the workings of a currency board. Given the widespread failure of standard operating procedures, this alternative kind of exchange rate arrangement is worth a look in many countries. It would work especially well in Malaysia, which fortunately has sufficient international reserves of about \$20 billion. That would more than cover the central bank's monetary liabilities. There's no reason why Mahathir shouldn't give this a try.

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu)

JAMES C. COOPER & KATHLEEN MADIGAN

THE FED MAY KEEP ITS SCALPEL SHARPENED

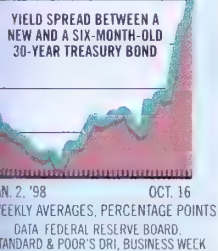
This credit squeeze is unlike any other, making more rate cuts likely

U.S. ECONOMY

Now that the Federal Reserve has shocked U.S. and global markets with an unexpected cut in interest rates between its regular meetings, where does policy go from here?

Fed Chairman Alan Greenspan offered a few hints in a speech back on Oct. 7. He laid out with unusual clarity his concerns about the unique nature of the emerging credit squeeze. He spoke from only a few notes, and one point said flatly, "I have never seen anything like this." In hindsight, that was a strong foreshadowing of the Fed's surprise quarter-point cuts in both the federal funds rate, to 5%, and the discount rate, to 4.75%, on Oct. 15, and more easing may well be on the way.

INVESTORS DEMAND LIQUIDITY PREMIUM



In its statement following the rate cut, the Fed said: "Following caution by lenders and unsettled conditions in financial markets more generally are likely to be restraining aggregate demand in the future." In plain English: Lenders are pickier about granting loans, and investors are fleeing the markets for safer territory, slowing the economy without the financial grease to keep its wheels turning. That means the Fed is likely to keep on easing until the danger has passed.

WHAT WILL WE KNOW when the pinch is letting up? For that one, you have to understand why Greenspan finds this credit squeeze so unique—and perhaps harder to deal with. Much has been written about the flight-to-quality aspect. Investors and lenders are demanding more reward for taking on more risk, as seen in the widening yield spreads between riskless Treasury bonds and riskier corporate bond issues.

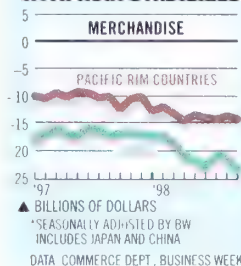
But far more important, as Greenspan discussed at length on Oct. 7, this credit squeeze is also a flight to liquidity, caused by increased uncertainty (chart). Amid global turmoil and its fallout on U.S. markets, individ-

uals are demanding a big premium—not only for added risk, but also for giving up the ability to free themselves from an investment as fast as possible.

Uncertainty is very different from risk. Using yield spreads between Treasury and corporate issues, risk is easy to measure. But increased uncertainty is intangible. It is more psychological, making it difficult for the Fed to combat. This uncertainty effect shows up in the sharply wider yield spread between a new 30-year Treasury bond and one that is only six months old. Both issues are riskless, but the newer one is increasingly in demand and carries a lower yield, because it is the more liquid, or easier to unload.

As Greenspan said, when people "do not understand the rules or the terms of a particular type of engagement they are having in the real world, they disengage." As a result of new global uncertainty, the flight to shorter-term, more-liquid assets is not just pushing up the cost of credit, it is causing some markets, especially the very risky high-yield segment, to stop functioning altogether.

HAS THE TRADE GAP WITH ASIA STABILIZED?



THAT'S A POTENTIALLY DANGEROUS development for the real economy. Without financing, large sectors—from capital spending to housing—will sink. The good news: The Oct. 15 interest-rate cut, and any more that may follow, will be insurance against a more severe outcome.

For now, the expansion is simply slowing. Based on monthly data, the Commerce Dept.'s report on third-quarter gross domestic product, due on Oct. 30, is expected to show that the economy grew only a bit better than the 1.8% pace of the second quarter. Back in the spring, though, a severe widening in net exports and a slowdown in inventory accumulation sliced GDP growth. This time around, the trade deficit remains a big problem (chart), but domestic demand has slowed considerably from its 6.7% pace of the spring.

Consumer spending last quarter, for example, likely grew at about half its 6.1% pace in the second quarter. So far, job and income growth remain robust enough to keep household spending, and the economy, moving.

Sturdy consumer fundamentals also boosted resi-

dential construction last quarter. Housing starts slipped 2.5% in September to an annual rate of 1.58 million. But for the quarter, starts rose at a 17.6% annual rate, and the latest dip in mortgage rates will limit any housing slowdown. In fact, the National Association of Home Builders' Housing Market Index rose to a record high in October.

THE FED'S RATE CUT will bring some relief to capital-hungry businesses squeezed the most by higher risk and liquidity premiums. But the outlook for capital spending is dim. Third-quarter equipment investment likely grew in the single digits after surging 26% in the first half, and outlays for structures appear to have dropped for the third quarter in a row. Business spending will slow further, weighed down by costlier credit, weak profits, and sagging foreign demand.

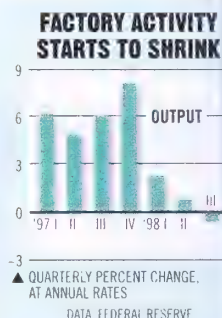
The collapse in foreign markets is a big reason foreign trade continued to deteriorate last quarter. The trade deficit in August ballooned to a record \$16.8 billion, from a revised \$14.5 billion. Exports fell for the fifth straight month, slipping 0.3% to \$74.8 billion. But imports surged 2.2%, to \$91.6 billion. One ray of hope might be appearing in the data for Asia. The U.S. merchandise trade gap with the Pacific Rim countries has held steady since May. That may be a sign that the region has hit bottom and is stabilizing.

Overall, the data suggest that net exports deducted

a bit less than one percentage point from real GDP growth last quarter. That's an improvement from the 2 points cut from first-half growth. The trade picture, however, isn't likely to brighten soon. The Asian crisis is only now hitting economies in Latin America and Europe, which together buy a third of U.S. goods exports.

That deterioration will continue to make manufacturing the weakest sector of the economy. Industrial production fell unexpectedly—and broadly—in September, slipping 0.3%. That followed a 1.6% jump in August when motor vehicle production bounced back after the General Motors Corp. strike. For the quarter, manufacturing output fell at a 0.6% annual rate, the first decline since the 1990 recession (chart). Excluding vehicles, output was down a larger 0.8%.

Given the uncertainty of global conditions, the most likely outlook for the U.S. economy remains modest growth in coming quarters. The Fed, however, realizes that even that scenario will depend on keeping the economy's wheels moving smoothly. That means more squeaks will be met—perhaps very quickly—with more policy grease.



ITALY

NEW FACES, SAME AGENDA

After the ouster of Prime Minister Romano Prodi, Italy's 56th government since World War II will try to salvage some semblance of policy continuity as the Jan. 1 dawn of the euro nears. To complicate matters, economic growth will be modest, at best, at a time when policy priorities are shifting from euro-related goals to a domestic need for faster growth and more jobs.

New Prime Minister Massimo D'Alema, head of the ex-communist Left Democrats, Parliament's largest party, hopes to forge a workable coalition mainly with the centrist Democratic Union for the Republic (UDR), along with other potentially antagonistic parties.

The hope is to move Prodi's center-left government closer to the center, and marginalize the Re-founded Communist party. The RC, Prodi's antithetical ally, withdrew its support for him over his 1999 budget cuts, toppling the government on Oct. 9. However, the new coalition may be just as unstable as the last.

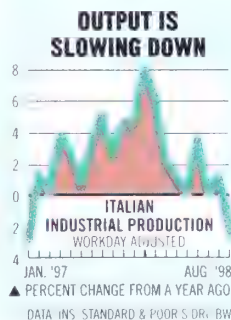
As part of the quest for continuity, D'Alema will retain several of Prodi's cabinet ministers, including Treasury Minister

Carlo Azeglio Ciampi, and the new government should pass Prodi's previously rejected 1999 budget with little change. Also, D'Alema will create a ministry for constitutional and electoral re-

form. Reform efforts are part of the UDR's conditions for support.

D'Alema inherits an economy that is expected to show slow but steady growth averaging about 2% both this year and next. Weaker global growth will hit exports and hurt domestic confidence, spending, and hiring. However, domestic demand will receive support from a shift to less restrictive fiscal policy and lower rates. Also, lower rates will cut government debt service, allowing more fiscal leeway.

In fact, with political stability restored and with inflation below the Bank of Italy's 2% target, a rate cut is imminent. The BOI is under pressure to merge Italy's official 5% rate with the expected 3.3% euro-area level. However, 2% growth will do little to reduce joblessness, still above 12%.



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DOES EVERYONE DO IT?

Sure, it's dog-eat-dog in the Valley, but Microsoft is the 800-lb. pit bull

As the Justice Dept. and Microsoft Corp. lay out their arguments in a U.S. District Court in Washington D.C., it seems that the outcome of this historic antitrust suit may come down to a fairly simple question: Is Microsoft's behavior, as Justice litigator David Boies insisted in his opening argument on Oct. 19, that of a predator who uses illegal means to stifle competition? Or does Microsoft merely use the same bag of tricks that others do in its cutthroat, fast-moving industry? That's the essence of the defense that John L. Warden, Microsoft's lead trial attorney, outlined the next day.

If Microsoft convinces Judge Thomas Penfield Jackson that its version of reality is right, this antitrust case could set a new legal standard for the high-tech industry, one that would allow its bigger players more leeway than those in other industries. If the government view prevails, Microsoft could emerge as a vastly different company.

To Justice and Microsoft's critics, the answer is clear. This is not an industry problem but rather bullying by a monopolist. With more than 90% of personal computers carrying the Windows operating system, Microsoft had influence over other companies and has used it to head off competition from potential

rivals—most notably browser pioneer Netscape Communications Corp. Microsoft, Justice claims, was even able to push around giants such as Apple Computer, Compaq, and Intel.

SHARP ELBOWS. That portrait rings true for many in the industry. Oracle Corp. CEO Laurence J. Ellison has accused Microsoft of pressuring former Digital Equipment Corp. CEO Robert B. Palmer to stop producing a network computer that would have competed with Windows-based PCs. "Anybody who can bully [Intel Corp. Chairman] Andy Grove or Bob Palmer has unusual power," says Ellison.

Clearly, Microsoft isn't the only player with sharp elbows in the computer industry. Indeed, on the first day of cross-

examination, Warden showed how ruthless Ellison can be—at least in terms of rhetoric. He asked Netscape CEO James L. Barksdale where he first encountered the term "cut off their air supply," which has emerged as an ominous-sounding threat against Netscape in a Microsoft e-mail. The answer: From Oracle, who promised to administer that treatment to rival Informix.

And you don't have to look far to find companies doing all sorts of Microsoftian things. Bundling—the tactic of forcing customers to buy a new product along with an older one? Look at Microsoft: It recently added its own HotJava browser to its operating system—and integrated it so thoroughly



JUSTICE SAYS...

■ **COLLUSION** Attempts by Microsoft to get companies to support its products—or, in the instance of Netscape, to avoid the Windows market—are anticompetitive.

■ **INTIMIDATION** Microsoft forces PC makers to exclude icons for other browsers on the Windows' opening screen.

■ **PREDATORY BEHAVIOR** To undermine competitors, Microsoft gives new products away, often by bundling them with Windows or Office.



MICROSOFT SAYS...

■ **COOPERATION** It is standard industry procedure for high-tech companies to work together to develop new markets efficiently.

■ **PROTECTING PRODUCTS** A company has every right to ask distributors to pass along its products unaltered.

■ **COMPETITIVE** Bundling products is common across the industry and not forced on customers.

the browser must be used to install the operating system. Meanwhile, IBM actually gives away Lotus Notes with hardware, says Rob Enderle, an analyst with Giga Information Group.

The government also accuses Microsoft of pressuring customers and rivalries into supporting a broad array of Microsoft technology. Microsoft insists this is simply a sensible way of cooperating and helping create a world of products that can work well together. Instead, it notes, the industry has actually developed a jargony name for it—"cooperation." Furthermore, Microsoft says that four of its competitors—Sun, Apple, Netscape, and IBM—are jointly doing research on Sun's Java pro-

gramming language, which is a threat to Windows. Says Microsoft spokesman Mark Murray: "That's the way of the world in the computer industry."

But it's not that simple. Justice will argue—and this is where the scales could tip—that what is okay for most competitors to do is illegal when a monopoly does it. Ellison may threaten to cut off somebody's air supply, but only a player as powerful as a Microsoft can deliver on the threat, Justice argues. "Monopolies have to be held to a different standard because they have monopoly power," antitrust chief Joel I. Klein told a gathering of computer industry leaders on Oct. 20. The Supreme Court agrees, ruling that conduct that could be

benign when engaged in by a competitor even with large market share may be illegal when engaged in by a monopolist.

Certainly, Microsoft rivals feel that Windows has given the company a commanding monopoly that gives it awesome power. Sun CEO Scott G. McNealy points out how Compaq Computer caved in when Microsoft forbade it to remove the Microsoft Internet Explorer icon from opening screens on Windows computers. "When Microsoft threatens to terminate a PC maker's Windows license, what alternative does it have?" he asks. "As big and resource-rich a company as Compaq obviously thought they had none." Justice will trot out such examples to convince Jackson that Microsoft is, in fact, a monopoly that has abused its extraordinary power to thwart competition.

Microsoft will argue that, despite its high share of the PC market, it is not a monopolist. The industry, it insists, is too fast-changing and has too few barriers to sustain a monopoly. Microsoft attorney Warden told the court that traditional barriers—like billion-dollar buildings—don't exist, for example. All a potential challenger needs is brains, some startup capital, and a computer, he says. And he noted that Microsoft would not be spending \$3 billion a year in research if it could sit back on its monopolist laurels. "This is no comfortable or quiet monopolist backwater," he declared.

Which view will prevail? Frederick R. Warren-Boulton, an economist who will be a government witness, said in a document submitted to the court that barriers are actually fairly high and that users are, in effect, "locked into" Windows because they can only opt out by paying enormous costs. For PC makers, there are few, if any, options.

In the coming weeks, the government will try to prove that the leverage of the Windows monopoly gave Microsoft unparalleled power. "We don't all do business like Microsoft for the simple reason that our customers won't let us," says Sun's McNealy. But they might if they could.

By Steve Hamm in San Mateo and Susan B. Garland in Washington with Andy Reinhardt in Scottsdale, Ariz., and bureau reports

BusinessWeek COURT TV

Business Week and Court TV are offering daily updates on the Microsoft antitrust trial on the Web at www.businessweek.com and www.courtstv.com or on AOL at Keyword: BW Daily. Also, tune in for a weekly recap of the case on "Microsoft on Trial," every Thursday at 7pm E.T. on Court TV.



WALL STREET

THANKS FOR THE RATE CUT, BUT...

The stock market needs better earnings to keep the bears at bay

Even in a stock market that has cowed investors for years, the October surprise was a stunner: In just five trading sessions between Oct. 15 and 21, a lightning-like Dow Jones industrial average soared 550 points, to 8519, a 6.9% gain. Both the Dow and the Standard & Poor's 500-stock index have now regained half of what they lost from July 17 to Aug. 31. Buoyed by rapidly rising prices, investors are becoming cautiously optimistic that the vicious bear that roughed them up in August and September has gone into hibernation. "We've seen the lows," declares market analyst Laszlo M. Birinyi of Birinyi Associates Inc. "It gets even better from here."

Are the old highs just around the corner? Not likely. The market got an enormous psychological boost from the Federal Reserve on Oct. 15, when the central bank cut both the federal funds and discount rates by a quarter-point each—without waiting for the next Fed

governors' meeting. And the Fed may cut more. But what would really give a market rebound new oomph is a combination of falling interest rates with rising corporate profits.

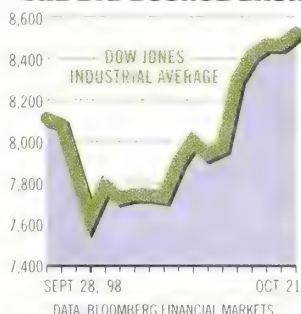
We've got falling rates, but profit growth is nowhere in sight (page 36). "When I heard of the cut, my view changed instantly from moderately negative

to moderately positive," says Trent May, who runs the Invesco Growth and Invesco Growth & Income funds. "But you have to be nervous about earnings and quality of earnings. And all the crises haven't passed because the Fed cut rates."

At first blush, by some measures, stocks appear undervalued, even after the mighty

rally. Edward E. Yardeni, chief economist for Deutsche Bank Securities, says stocks still have a ways to go if you compare the price-earnings ratios of the S&P 500 with the new yields on 10-year Treasury bonds, which have fallen a full percentage point in the past 10 weeks.

THE BIG BOUNCE BACK



DATA: BLOOMBERG FINANCIAL MARKETS

Moreover, says Yardeni, this is apparently the way Fed Chairman Alan Greenspan looks at stocks—at least, as was so reported in the Fed's *Monetary Policy Report* to Congress last year. In that reckoning, says Yardeni, stocks are about 9% undervalued.

But that calculation is based on a forecast of earnings for the S&P 500 for the next 12 months approaching \$30 a share—a figure that many, including Yardeni, think is too high. The figure is a composite of analysts' forecasts for the individual companies in the S&P 500. And "analysts have been cutting earnings estimates for the rest of 1998, they've barely touched 1999," says Charles L. Hill, research director at First Call Corp. "Those forecasts have to come down." If they shrink enough, it could change the stock valuation picture in a snap.

TIPTOEING. More rate cuts by the Fed won't solve the earnings problem—except perhaps in rate-sensitive industries such as banking. Indeed, if the Fed continues to make cut after cut, says Richard Bernstein, director of quantitative research at Merrill Lynch & Co., it will be because of "lengthening and deepening of the profits recession."

Earnings are by no means the only problem facing the stock market. The market can't build a head of steam if the capital markets are plagued by uncertainty. Trading has virtually stopped in a wide range of markets, from mortgage-backed securities to junk bonds to emerging-market debt. While the Japanese have finally passed a banking reform program, there's no guarantee it will work. And while Congress has O.K.'d additional funding for the International Monetary Fund, that's only one—perhaps ineffectual—step toward ending the emerging-markets crisis.

Still, the sharp rally should help restore investor confidence. Mutual-fund investors tiptoed back into funds in September after heavy redemptions in August, but they were timid. And in the first two weeks of October, they pulled about \$4.8 billion out of domestic equity funds, says Robert Adler of AMG Investment Services. But mutual-fund flows tend to follow market performance, so the stock back should draw more money back and help offset some of the inevitable year-end tax-related selling.

Even troubled hedge-fund investors are more likely to hang in, given the rebound. George P. Van, whose Hedge Fund Advisors tracks these private partnerships, says managers are gearing up for large redemptions. He says investors could pull at least 10%

money out—roughly \$16 billion in
ty—at their next redemption win-
typically at the end of the quarter.
“if the market is at today’s level at
end of the year, redemptions will
a nonissue,” says Robert I. Schul-
president of Tremont Advisers
a hedge-fund consultant.
ven if the market hangs around the

mid-8000’s, volatility will likely remain
high. One measure of that condition is
the OEX Volatility Index compiled by
the Chicago Board Options Exchange.
While the current figure, 31.7, is down
sharply from nearly 50 at the end of
August, it’s still almost 50% higher than
it was in the first half of 1998.

With the Fed firmly on the side of

easing, and with rates coming down
abroad, it’s unlikely that the stock mar-
ket will give up much of its recent gain.
But until investors see some new spunk
in earnings on the horizon, they’re not
about to take the market back to its
old highs and beyond.

By Jeffrey M. Laderman
in New York

COMMENTARY

By Peter Coy

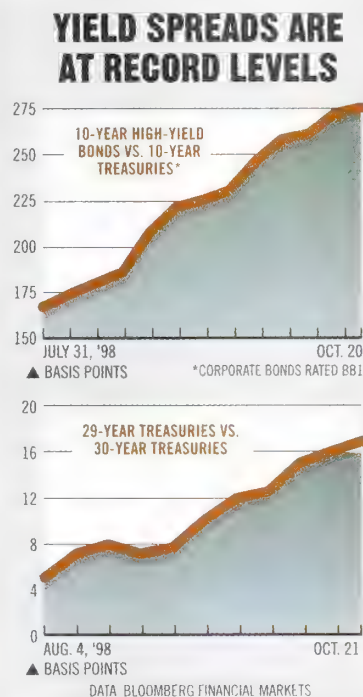
THE ONLY THING WE HAVE TO FEAR IS FEARFUL INVESTORS

Don’t put on those party hats yet.
The U.S. financial markets are
not as healthy as you might
think from the rebound in equities.
Outside the newly hopeful stock mar-
ket, all seats on the flight to quality
are still booked. Despite two confi-
dence-building cuts in interest rates
by the Federal Reserve, the yield
spreads, or risk premiums, between
safe and risky assets have actually
gotten wider. And risky assets aren’t
the only ones investors have aban-
doned: They’re even steering clear of
safe but less liquid assets, like cer-
tain U.S. government bonds that are
less traded—and thus harder to un-
load at a moment’s notice. In other
words, there’s a flight to liquidity as
well as a flight to quality.

This kind of near-paralysis is bad
for hedge funds such as the benign-
d Long-Term Capital Management
that are betting on healthy markets
and narrow spreads. But that’s not
all: It could be bad news for the en-
tire U.S. economy. With conditions
so hostile, junk-bond issuance and
initial public offerings have nearly
come to a standstill. Markets aren’t
performing their core function of fi-
nancing companies that need capital
to expand. If this goes on for too
many more months, it will begin to
take a bite out of economic growth
and job formation.

CONFIDENCE GAP. Scan the indicators
and it appears that away from the
stock exchanges, there’s little more
confidence now than there was on
Oct. 7, when Fed Chairman Alan
Greenspan spoke of “a broad area of
uncertainty or fear” and said that in-
vestors are “disengaging.” That dis-
engagement shows up as high volatili-
ty—fluctuations in prices—and in
wide gaps between the prices sellers
and buyers quote each other. In the
high-yield corporate bond market, ac-
tive players such as Merrill Lynch &
Co. usually are willing to buy big

blocks of bonds without knowing to
whom they’ll sell them. That’s known
as “open-ending.” But now, few firms
will buy bonds without having a
place to sell them already lined up.
Says Martin S. Fridson, Merrill’s
chief high-yield strategist: “The
willingness to open-end is much
reduced.”



It appears, as Prudential Securities Inc. said in a recent newsletter, that “investors are now motivated solely by fear and not by greed.” Fear explains the distaste for junk bonds. Since July, as the top chart shows, the yield spread—the difference in effective interest rates—between 10-year BB1-rated bonds, just below investment grade, and 10-year Treasuries has grown from 170 basis points (1.7 percentage points) to 270 basis points.

The bottom chart is scarier, be-

cause it depicts an aversion even to securities in which safety is not a factor. It shows a tripling of the yield spread between 29-year Treasury bonds and 30-year Treasury bonds. The 29-year bonds are actually 30-year bonds that were issued last year. Although these securities are equally safe, they are less heavily traded than the new issues. Some investors began shying away from the older bonds, fearing that they would be harder to liquidate quickly for a full price. Their fears about a lack of liquidity became a self-fulfilling prophecy as more and more investors backed away from the older bonds.

COLD FEET. Markets that are this much out of alignment are supposed to present a golden opportunity for arbitrageurs, who exploit temporary discrepancies in prices of related assets. But as demonstrated by Long-Term Capital Management, arbitrage often fails when it’s most needed, says David A. Hirshleifer, a professor of finance at University of Michigan Business School. Lenders to the arbitrageurs get cold feet. And trading gets so thin that it’s difficult for arbitrageurs to close out their positions at good prices. The very fact that someone wants to sell is taken as bad news. Says Hirshleifer: “Each person is afraid that the other guy knows something he doesn’t know.”

There’s a chance, of course, that the situation will right itself soon. Stock investors’ optimism could start to rub off on other investors. But it’s also conceivable that it’s the stock buyers who have gotten a bit ahead of themselves and that the bond pessimists will prevail. If so, the disengagement that the Fed chairman has observed could settle in for a long engagement.

Coy is associate economics editor.

TELECOMMUNICATIONS

WRONG NUMBERS FOR TELECOM UPSTARTS

They're short on capital as junk bonds dry up

In early October, Richard P. Anthony, chief executive of Advanced Communications Group Inc., set out on a week-long fund-raising trip in New York. While he felt he made some progress in his effort to raise capital during visits to Wall Street bankers, he headed back to St. Louis still in need of \$100 million to expand his company's telecommunications network.

Until recently, raising that kind of money for an upstart phone company like Advanced Communications came easily. Since the Telecommunications Act of 1996 cracked open the door to competition in local telephone markets, all that was needed by a company setting out to provide "competitive access"—an alternative to the local Baby Bell monopoly—was a reputable management team and a credible business plan. That unleashed a flood of money: Since the beginning of 1997, Wall Street has raised \$15.3 billion through more than 100 equity and bond offerings to fund such new phone upstarts, according to Bear Stearns estimates.

All that was before the economic turmoil in Asia and other emerging markets prompted a "flight to quality" by investors. That phenomenon has all but shut down issuance of the high-yield junk bonds that have been a favorite investment vehicle for such companies since the days when MCI was a pup.

"BUYERS' STRIKE" Now, the drought is wreaking havoc on business plans of emerging telecom companies. Iowa-based discount long-distance competitor Telegroup Inc. says it will lay off 15,000 workers in October and will delay network expansion until it can raise \$60 million. The last high-yield bond issue from a telecommunications company was in July when COLT Telecom Group PLC of London raised nearly \$1 billion. "During the past two months, it's almost as if there's been a buyers' strike," says Jude

Driscoll, vice-president of high-yield bond trading at Canseco Capital Management.

These risk-averse market conditions have smaller telecom companies scrambling for alternative financing. Advanced Communications has resorted to knocking on bank doors or pitching private investors who are demanding a lot more for their money, including bigger equity stakes in a company and unusually high rates of return on their investments, according to Paul Salem, managing director at Providence Equity Partners, a private telco investor.

"We have expensive capital," he says. "That's no secret." Meanwhile, banks tend to shy away entirely from such a risky and capital-intensive investment.

Because of the crunch, Advanced Communications—which has seen its stock plummet from \$14 to about \$4 since its IPO in February—is slashing its capital expenditures in half next year and reducing new service offerings. And even companies with plenty of cash on hand are taking precautions. Focal Com-

munications Corp. of Chicago, with about \$125 million in cash, says it still is considering whether to seek finance plans from equipment vendors, such as Lucent Technologies Inc. or Nortel, which make the expensive switches that direct calls through a network. Like venture capitalists, however, vendors are charging high

STYMIED: Advanced Communications CEO Anthony

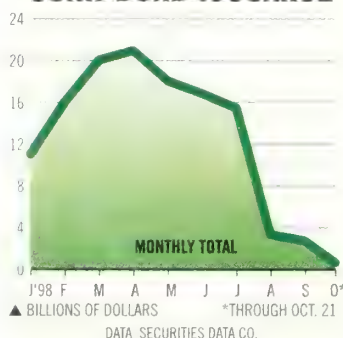
rates, says Focal's chief financial officer, Joseph A. Beatty.

GST Telecommunications Inc. in Vancouver, Wash., has stashed away \$1 million in cash from previous round financing—enough to last through 1998. Still, it's weighing whether to sell parts of the company that don't suit its business model—to raise money and lower funding needs. Its model is primarily to serve business customers so it may scale back sharply on plans for residential service. It might also launch a long-distance subsidiary in Guam, suggests CEO Joseph A. Basile Jr. "We want to minimize [our capital] burn rate, become more attractive in our ability to raise capital," he says.

Yet some analysts say they're beginning to see signs that the high-yield market is opening up again. But until the outlook for the rest of the financial system improves, it is unlikely financing will approach 1997's record levels. That could mean some startups won't survive. They will wind up merging—if they lose out in the competition for access to capital.

By Roger O. Crockett in Chicago

JUNK-BOND ISSUANCE





Good guys

Even the bravest, most fearless crusaders find they need a dependable sidekick

have always ridden with

to help save the day. And sometimes, that means just picking up a carton of milk on the

a trusty companion.

way home from the office. The Toyota Camry. After all, even heroes need a car.



Camry

TOYOTA | everyday

CORPORATE PROFITS

OUGH. IT'S STARTING TO HURT

U.S. third-quarter earnings are off 7% from last year's level

So, how bad was it? Not apocalyptic, but Wall Street's anxiety over third-quarter results was well founded. BUSINESS WEEK's flash earnings report, based on announced profits of 130 companies, is a sign of a slowing economy: Profits are down 7% from a year ago, on an anemic 2% sales increase. Worse, the weakness that emerged in the second quarter has now spread beyond manufacturing to service companies—whose earnings had risen 20% in the second quarter, only to drop 23% in the third.

Much of that pain was concentrated in financial services, as companies counted up losses from the stumbling stock market, hedge funds, and emerging-market investments. Among the banks, profits at BankAmerica Corp.

(that is, the combined NationsBank Corp. and the old BankAmerica) were down 78%, on a \$519 million charge for the merger. Net income at J.P. Morgan & Co. fell 61%. At the brokerages, Merrill Lynch & Co. had a \$164 million loss, on a \$288 million charge for eliminating 5% of its staff. Bear, Stearns & Co.'s earnings were down 60%, while Donaldson, Lufkin & Jenrette Inc. was off 79%. Take out the banks and brokerages, and quarterly profits would have broken even.

The drop isn't all the fault of financial services. A chunk of the bad news this quarter can be attributed to General

Motors Corp.'s \$809 million, strike-induced loss. Take out the carmaker, and earnings would have declined only 3%.

And GM wasn't the only big name on the casualty list: Gillette was off 99%, Compaq Computer fell 78%, and DuPont lost \$564 million. Furthermore, Motorola Inc. was \$42 million in the red. Oil companies were hit hard, too, with profits down at Exxon (-23%), Amoco (-54%), and Texaco (-56%).

On the plus side, Microsoft Corp. paced technology companies with a stunning 154% profit leap. Apple Computer Inc. roared back from a \$161 million loss to a \$106 million profit. Chrysler Corp. surged past rivals with a 55% hike in earnings. And SBC Communications Inc.'s 48% earnings rise boosted the utilities-and-telecom sector by 11%.

For the fourth quarter, analysts surveyed by I/B/E/S International Inc. expect profits for the S&P 500 to be up 4.7%. Then again, at the start of the year, they predicted a 14.8% jump. Stay tuned.

By Frederick F. Jespersen in New York

CURRENT QTR. SALE
(MILLIONS)

INDUSTRIALS

ABBOTT LABORATORIES	3,035.8
ALCOA	4,108.9
ALLIEDSIGNAL	3,741.0
AMERICAN HOME PRODUCTS	3,224.1
AMOCO	7,493.0
BESTFOODS	1,983.4
BLACK & DECKER	1,107.7
BRISTOL-MYERS SQUIBB	4,523.0
CASE	1,534.0
CATERPILLAR	5,173.0
CHRYSLER	14,482.0
CLOROX †	685.9
COCA-COLA	4,747.0
COLGATE-PALMOLIVE	2,265.4
CONAGRA †	6,483.4
COOPER TIRE & RUBBER	480.6
CROWN CORK & SEAL	2,291.0
CUMMINS ENGINE	1,525.0
DANA	2,962.4
DOVER	1,231.2
DUPONT	6,042.0
EASTMAN KODAK	3,391.0
EXXON	28,779.0
FORD MOTOR	32,640.0
GENERAL DYNAMICS	1,172.0
GENERAL ELECTRIC	24,136.0
GENERAL MOTORS	34,423.0
GEORGIA-PACIFIC GROUP	3,367.0
GILLETTE	2,531.0
GOODYEAR TIRE & RUBBER	3,191.7
HARLEY-DAVIDSON	520.8
HASBRO	945.5
IBP	3,210.7
INTERNATIONAL PAPER	4,900.0
JOHNSON & JOHNSON	5,724.0
LEAR	1,946.5
LOCKHEED MARTIN	6,349.0
MERCK	6,838.3
MONSANTO	1,986.0
NIKE †	2,504.8
NORTHROP GRUMMAN	2,213.0
OWENS CORNING	1,324.0
PARKER-HANNIFIN †	1,218.7
PEPSICO	5,544.0
PFIZER	3,330.0
PHELPS DODGE	764.0
PHILIP MORRIS	18,587.0
PPG INDUSTRIES	1,804.0
REYNOLDS METALS	1,368.0
SCHERING-PLOUGH	1,986.0
SHERWIN-WILLIAMS	1,341.4
TEXACO	7,707.0
TRW	2,836.7
UNION CAMP	1,107.3
UNITED TECHNOLOGIES	6,422.0
WARNER-LAMBERT	2,560.2
WEYERHAEUSER	2,736.0
WHIRLPOOL	2,539.0

SERVICES

ADP †	1,210.3
AMR	5,046.0
ASSOCIATES FIRST CAPITAL	2,304.7
AVIS RENT A CAR	652.4
BANK OF NEW YORK	NA
BANKAMERICA	NA
BEAR STEARNS †	1,723.6
BOISE CASCADE OFFICE PRODS.	760.4

% CHG.	EST. EPS (8/20)	REPORTED EPS	DIFF.		CURRENT QTR. SALES (MILLIONS)	% CHG.	QTR. PROFITS (MILLIONS)	% CHG.	EST. EPS (8/20)	REPORTED EPS	DIFF.
-7	0.62	0.52	-0.10	CHASE MANHATTAN CITICORP	NA NA	NA NA	837.0 530.0	-15 +4	1.21 NA	0.94 NA	-0.27 NA
+13	0.34	0.34	—	CNF TRANSPORTATION	1,282.5	+14	44.0	+11	0.76	0.78	+0.02
-5	1.11	1.21	+0.10	DLJ	1,069.8	-16	25.7	-79	0.76	0.15	-0.61
+13	0.59	0.58	-0.01	DOW JONES	443.6	-30	25.9	-4	0.40	0.27	-0.13
+42	0.47	0.46	-0.01	ENRON	11,320.0	+95	168.0	+25	0.44	0.47	+0.03
-54	0.45	0.31	-0.14	FDX †	4,082.0	+6	149.0	-10	0.98	1.00	+0.02
+15	0.56	0.56	—	FIRST UNION	4,239.0	+53	995.0	+33	0.97	1.01	+0.04
+14	0.68	0.72	+0.04	GANNETT	1,226.1	+7	176.5	+16	0.62	0.62	—
+13	0.95	0.95	—	GOLDEN WEST FINANCIAL	775.3	+5	108.0	+20	1.78	1.85	+0.07
-19	1.20	0.82	-0.38	GRAINGER (W. W.)	1,120.0	+5	56.1	-1	0.61	0.57	-0.04
-13	0.99	0.92	-0.07	HBO & CO.	399.6	+30	83.7	+57	0.18	0.19	+0.01
+55	0.76	1.02	+0.26	HERTZ	1,225.1	+11	118.7	+27	1.05	1.09	+0.04
+15	0.82	0.81	-0.01	HILTON HOTELS	1,333.0	+1	79.0	-16	0.38	0.30	-0.08
-12	0.41	0.36	-0.05	KROGER	8,023.9	+4	124.4	+29	0.44	0.47	+0.03
+14	0.66	0.66	—	MARRIOTT INTERNATIONAL	2,263.0	+9	86.0	+16	0.33	0.32	-0.01
-8	0.23	0.23	—	MBNA	NA	NA	216.6	+26	0.27	0.27	—
-4	0.45	0.39	-0.06	MCDONALD'S	3,215.0	+7	482.2	+7	0.69	0.69	—
NM	1.07	-0.20	-1.27	McGRAW-HILL	1,206.4	+5	169.4	+18	1.57	1.71	+0.14
NM	1.38	-0.52*	-1.90	MERRILL LYNCH	8,712.0	+4	-164.0	NM	1.23	0.32*	-0.91
NM	0.85	0.82*	-0.03	MORGAN (J.P.)	NA	NA	156.0	-61	2.01	0.75	-1.26
-8	0.47	0.42	-0.05	MORGAN STANLEY DEAN WITTER	7,498.0	+3	645.0	-5	1.20	1.05	-0.15
NM	0.66	0.67*	+0.01	NATIONAL CITY	NA	NA	344.5	+22	1.01	1.03	+0.02
+72	1.19	1.21	+0.02	NEW YORK TIMES	682.7	0	55.0	+19	0.28	0.29	+0.01
-23	0.64	0.58	-0.06	PAINEWEBBER GROUP	1,809.1	+3	82.9	-27	0.74	0.51	-0.23
-11	0.79	0.80	+0.01	ROADWAY EXPRESS	617.1	-4	4.3	-58	0.40	0.22	-0.18
+15	0.72	0.74	+0.02	SAFEWAY	5,589.0	+4	193.7	+29	0.37	0.38	+0.01
+13	0.69	0.69	—	SCHWAB (CHARLES)	872.0	+16	97.8	+28	0.31	0.35	+0.04
NM	-0.18	-1.28	-1.10	SERVICE MERCHANDISE	605.0	-8	-38.1	NM	-0.24	-0.38	-0.14
-5	0.26	0.43	+0.17	STATE STREET	981.0	+26	110.9	+10	0.69	0.68	-0.01
-99	0.43	0.30*	-0.13	SUNTRUST BANKS	1,218.2	+6	188.8	+12	0.89	0.91	+0.02
0	1.26	1.17	-0.09	TIME WARNER	3,578.0	+11	39.0	NM	-0.04	-0.06	-0.02
+27	0.33	0.34	+0.01	TRAVELERS GROUP	8,221.9	-17	199.2	-81	NA	NA	NA
-21	0.62	0.45	-0.17	TRICON GLOBAL RESTAURANTS	2,017.0	-12	128.0	+62	0.62	0.82	+0.20
+125	0.35	0.70	+0.35	UAL	4,783.0	+3	425.0	-27	3.99	3.71	-0.28
-79	0.30	0.25*	-0.05	WELLS FARGO	NA	NA	347.0	+20	3.93	3.99	+0.06
+12	0.70	0.70	—	YELLOW	744.9	-2	13.5	-29	0.66	0.52	-0.14
-41	0.54	0.32	-0.22	TECHNOLOGY	57,934.9	+11	1,042.0	+7	1.11	1.06	-0.05
-4	1.71	1.67	-0.04	ADVANCED MICRO DEVICES	685.9	+15	1.0	NM	-0.20	0.01	+0.21
+14	1.12	1.12	—	APPLE COMPUTER ††	1,556.0	-4	106.0	NM	0.49	0.68	+0.19
NM	0.16	0.13*	-0.03	COMPAQ COMPUTER	8,791.0	+36	115.0	-78	0.06	0.07	+0.01
-35	0.48	0.56	+0.08	GENENTECH	289.9	+25	63.4	+97	0.36	0.49	+0.13
+18	1.79	1.67	-0.12	HUGHES ELECTRONICS	1,513.3	+20	37.6	-20	0.14	NA	NA
+129	1.31	2.32	+1.01	IBM	20,095.0	+8	1,494.0	+10	1.54	1.56	+0.02
0	0.68	0.71	+0.03	INTEL	6,731.0	+9	1,559.0	-1	0.73	0.89	+0.16
+38	0.41	0.50	+0.09	IOMEGA	391.8	-9	-14.8	NM	-0.05	-0.06	-0.01
-12	0.57	0.39	-0.18	LSI LOGIC	390.4	+19	-282.8	NM	0.19	0.14*	-0.05
-73	0.55	0.49	-0.06	MICROSOFT †	3,953.0	+26	1,683.0	+154	0.49	0.62	+0.13
+41	0.84	0.81	-0.03	MOTOROLA	7,152.0	-3	-42.0	NM	0.01	-0.07	-0.08
+45	1.01	0.93*	-0.08	SUN MICROSYSTEMS †	2,491.2	+19	113.9	+5	0.49	0.50*	+0.01
-376	0.85	0.89*	+0.04	TEXAS INSTRUMENTS	2,113.0	-15	164.0	-31	0.29	0.41	+0.12
+22	0.57	0.58	+0.01	UNISYS	1,781.4	+10	95.6	+88	0.25	0.26	+0.01
+2	0.62	0.58	-0.04	UTILITIES & TELECOM	50,346.0	+10	1,144.0	-11	1.10	1.05	-0.06
-56	0.53	0.38	-0.15	AMERITECH	4,290.0	+7	645.0	+5	0.58	0.58	—
-4	0.88	0.85	-0.03	BELL ATLANTIC	7,909.9	+7	-7.2	NM	0.68	0.69*	+0.01
NM	0.26	0.20*	-0.06	BELLSOUTH	5,865.0	+13	814.0	-31	0.81	0.82	+0.01
+16	1.36	1.41	+0.05	COLUMBIA ENERGY GROUP	1,458.1	+47	11.2	NM	0.12	0.13	+0.01
+49	0.34	0.35	+0.01	EDISON INTERNATIONAL	3,440.8	+26	226.2	-21	0.70	0.60	-0.10
-4	0.37	0.56	+0.19	ENTERGY	4,587.4	+64	262.6	+181	0.98	1.02	+0.04
NM	1.03	1.02	-0.01	FPL GROUP	1,999.0	+8	290.0	+8	1.59	1.66	+0.07
-23	0.80	0.69	-0.11	PECO ENERGY	1,794.0	+40	274.0	+73	0.71	1.20	+0.49
+17	0.41	0.40	-0.01	SBC COMMUNICATIONS	6,776.0	+7	1,207.0	+48	0.53	0.65	+0.12
+34	2.19	2.48	+0.29	SOUTHERN	3,458.0	-15	523.4	+36	0.76	0.74	-0.02
+17	0.92	0.91	-0.01	SPRINT	4,062.2	+7	239.3	+13	0.43	0.54	+0.11
+117	0.75	0.83	+0.08	UNICOM	2,096.0	-1	279.5	-1	1.11	1.22	+0.11
+10	0.39	0.39	—	US WEST	3,112.0	+5	379.0	-10	0.75	0.75	—
-78	1.18	0.21	-0.97	† Second-quarter results †† Fourth-quarter results NM = not meaningful NA = not available *EPS adjusted for special items							
-60	1.25	0.40	-0.85	DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF McGRAW-HILL INC. EARNINGS ESTIMATE DATA PROVIDED BY I/B/E/S INTERNATIONAL INC.,							
-6	0.25	0.18	-0.07	NEW YORK, NY. I/B/E/S IS A REGISTERED TRADEMARK OF I/B/E/S INTERNATIONAL INC.							

REGIONS

A CHILL IN THE VALLEY

America's high-tech mecca feels twinges of slower growth

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During a recent discussion of the world economy at a gathering of high-tech insiders in San Jose, Silicon Valley entrepreneur Harry Saal asked a crowd of 500 of his peers a simple question: If the Valley were a stock, would they buy, sell, or hold? What with the meltdown in emerging markets, the stock market tumult, and talk of a U.S. recession—not to mention cutbacks from Valley powerhouses like Hewlett-Packard Co. and Applied Materials Inc.—you might expect some skittishness. Not so. “Only one or two hands went up in favor of sell,” says Saal.

Had these folks had too much chardonnay? Not likely. By almost any measure, Silicon Valley's economy is still on track to remain the envy of the world. Almost \$13 billion in venture funds will flow into the area this year, on a par with 1997's record level. Unemployment was just 3.4% in August, compared with 4.5% nationwide. Commercial vacancy rates for the most popular areas are less

than 5%, roughly half the rate in other major markets. And the mood by and large remains buoyant. At Ferrari of Los Gatos, \$250,000-plus models are still selling—and the buyers include Joseph R. Kraus, the 27-year-old co-founder of Excite Inc., and Theodore W. Waitt, CEO of Gateway Inc. “I don't have a sense of looking over the precipice,” says HP economist Richard C. O'Brien.

That doesn't mean Silicon Valley isn't in for a reality check. Companies including Seagate Technology, HP, chipmaker LSI Logic, and semiconductor-equipment maker Applied Materials have already laid off more than 30,000 workers. Big players such as Intel Corp. and HP that have felt the crunch from Asia are bracing for more volatile times. Assuming no more global disasters, HP's O'Brien sees worldwide capital spending growth falling to 5%, from 12% a year ago. PCs are still selling well, but ever lower prices are crimping profits.

And while venture capital is still flow-

ROOMY: After layoffs, Applied Materials has office space for sublease

ing, public stock offerings—a key for Valley wealth creation—are off. Researcher VentureOne Corp. says there have been only 68 IPOs so far this year vs. 97 in the same period of 1997. VentureOne says depressed stock prices also slowed mergers—from 138 in 1997 to just 55 so far this year.

That has some venture capitalists changing tactics. Rather than lining up more new startups, many are sticking to latter-stage financing or even investing in public companies. “People realize the party is over, and it's having a sober effect,” says John A. Hawkins, managing general partner at Generation Partners, a venture-capital firm. In fact, valuations for startups have come down by as much as 35% in recent weeks, says Hawkins. “Like any boom, this one created excesses,” says Daniel H. Case III, chairman and CEO of Hambrecht & Quisenberry.

1985 REDUX? Even the Bay Area's sizzling real estate market is cooling. In 1997, recently, you could sell a starter home a day for as much as \$100,000 over asking price. But now, the San Jose Real Estate Board figures housing prices have risen just 5% this year, down from 11% in 1997. On the commercial side, developer John Mozart expects prices for developed properties to drop 10% to 20%, and some land prices to plummet as much as 40%. “There are just not a lot of buyers for big properties,” he says. “I don't count them on one hand.”

How bad will it get? Few analysts think the Valley is in for the kind of pain it suffered in 1985, when the industry contracted. Microsoft, Sun, and Intel have all reported surprisingly strong quarterly results. And there's no sign of letup in Internet development. There's even hope for the battered semiconductor industry. While revenues should fall 15.7% this year, “the general consensus is that we've hit bottom,” says G. Dan Hutcheson, president of market researcher VLSI Research Inc. “Now we've gotten through the worst of it.”

WHERE REALITY IS BITING

DATA: SILICON VALLEY JOINT VENTURE, VENTUREONE INC.

REAL ESTATE

- Home prices should rise just 5% this year—well off the double-digit pace of recent years.
- Prices for commercial space are already falling as companies sublease unneeded space and battered buyers—including REITs—lay low.

JOB

- With Intel, Hewlett-Packard, and Applied Materials cutting positions, new job creation will fall to 25,000 from 50,000 in 1997.
- Salaries should rise just 4% to 5%, rather than the 6% to 8% in 1997. The pace of hiring has slowed dramatically.

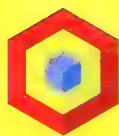
STARTUPS

- With capital markets volatile, venture capitalists are cautious. They're demanding lower valuations from startups and focusing more on existing investments.
- IPOs have slowed—68 in the first three quarters of 1998 vs. 97 in the same period of 1997.

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downtime, now's the time to be aggressive," says James C. Morgan, CEO of Applied Materials, the top manufacturer of chipmaking equipment.

Still, if the world financial market does worsen, look for more tumult in the Valley. Already, thanks to underwater options, headhunters report that it's easier to lure execs from their longtime employers. Compensation consultant

Matthew Ward of WestWard Pay Strategies says many companies are ready to reprice their options in short order if the stock market plunges again. Advanced Micro Devices Inc. and VLSI Technology Inc. have already done so.

Many Silicon Valley veterans say they actually welcome a breather. "As a resident, there's a part of me that's happy to see the frenetic stuff calming down,"

says Sun Microsystems Inc. Chief Financial Officer Michael E. Lehman, who has had three unwanted visits from estate agents offering to sell his house the last year. If the Valley outlook stays the same, his doorbell should get awfully quiet.

By Peter Burrows, with Linda Hiestein, in San Mateo, Calif., Otis Poole, in New York, and bureau reports

COMMENTARY

By Neil Gross

TARGET PIRATES—NOT TECHNOLOGY

In mid-October, pressed by the Recording Industry Association of America (RIAA), a U.S. District Court judge in Los Angeles slapped a temporary restraining order on a San Jose (Calif.) startup called Diamond Multimedia Systems Inc. Its alleged crime? Diamond wants to market a sleek, \$199 Walkman-sized widget called Rio. The gadget stores music files downloaded from sites on the Internet and plays them back at near-CD quality.

Rio may sound innocent enough, but RIAA says the device encourages piracy and jeopardizes copyright laws. Naturally, Diamond says Rio is perfectly legit. And music-loving digerati—who like the idea of getting portable versions of their favorite music from the Net—are siding with Diamond. The court hopes to settle the matter at a hearing on Oct. 26.

MISFIRE. Good luck. For lots of technical reasons Diamond can tick off, RIAA is on shaky legal ground. But in any case, the industry's approach is bound to backfire. From the days of Gutenberg, people have tried to stop new technologies that, they fear, threaten their livelihoods. And in almost every case, their efforts have failed because they misdirect their ire at the technology, not the people who would use it to harm them.

Rio was designed to piggyback on one of the hottest trends in cyberspace: the compression and distribution of audio files in a format called MP3. The technology—essentially a



LUDDITE FOLLY
Be it a printing press or a digital recorder, tech-bashers waste energy they could use to resolve problems the device raises

set of mathematical formulas—crunches music files way down, so they are easy to store and transmit over the Internet.

The technology is far from sinister. Legitimate sites such as MP3.com and

goodnoise.com use it to compress music tracks they obtain as promotions or license from record companies, which they then sell or give away with the companies' blessing. But hundreds of other sites stock illicit MP3 files that are pirated from audio CDs and posted for anyone to download for free.

Justifiably, the recording industry is outraged by these sites. It shuts down dozens each month, but they pop right up again. "These sites are run from the privacy of a college dorm, a student's home, or a cubicle at the office," complains Cary Sherman, RIAA's senior executive vice-president and general counsel. And their trendy clientele, he says, suffer

from an ethical disconnect: "These are people who would never think of shoplifting a CD from Tower Records."

All valid complaints. But instead of finding new ways to thwart pirates, RIAA has taken aim at the technology they use corruptly. "Rio doesn't promote piracy any more than a good pair of audio speakers does," argues Kenneth R. Wirt, Diamond's vice-president for corporate marketing. The device, which stores MP3 files on flash-memory chips, will let users carry MP3 files

around, just like a portable CD player. But there's no "record" button. It can only accept downloads that are already stored on a PC. And it can't upload those files to the Internet.

Legally, that makes all the difference. RIAA has invoked only one U.S. law to block sales of Rio: The 1992 Audio Home Recording Act. It requires copy protection on recording devices. But it also exempts computers and peripherals such as disk drives, which undercut RIAA's case.

The court fight could drag on for months. Whatever the outcome, RIAA and its fellow copyright agencies badly need a new strategy. Coming quickly through the gadget pipeline is a plethora of next-generation digital technology that won't fall under the 1992 law. It's only a matter of time before the motion-picture industry has its own Rio to cope with. That may spur more lawsuits. But no amount of litigation can put the digital genie back in the bottle.

Gross covers technology for BUSINESS WEEK in New York.

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EDITED BY KELLEY HOLLAND

NEWELL PUTS A MAT UNDER RUBBERMAID

NEWELL IS NOT EXACTLY A household name, even though it sells such consumer staples as Calphalon pots and Goody hairbrushes. But the Freeport (Ill.) company leaped to prominence on Oct. 21, when it announced a deal to pay \$5.7 billion in stock and debt for troubled Rubbermaid. It's making us "more important quickly," says Newell CEO John McDonough. Newell, the world's leading seller of window treatments and housewares, estimates the acquisition will hurt earnings, but only for one year. And Newell Rubbermaid, as the merged company will be known, will have major clout with big discounters such as

Wal-Mart Stores, Kmart, and Target Stores. Let the battle for shelf space begin.

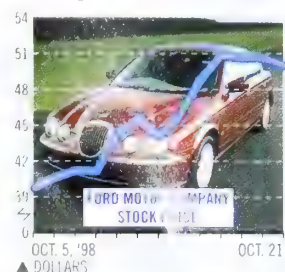
KAUFMAN & BROAD'S NEW ADDITION

BRUCE KARATZ HAS BEEN ON a mission to become the biggest homebuilder in the country, and on Oct. 20, he achieved his goal. The CEO of builder Kaufman & Broad inked a friendly deal to pay \$545 million in cash and stock for a California and Nevada rival, Lewis Homes Management. It's the latest in a string of deals for K&B, and it gives the company a dominant share of the currently robust California and Southwest markets. The move also comes at what many in the industry say is the tail end of a housing boom. But Karatz insists that he isn't worried. "I just don't see a recession," he says.

CLOSING BELL

FORD FLOORS IT

Ford Motor's stock is in overdrive these days. The market price has soared 25.8% since Oct. 5, to \$50 a share, outpacing the Dow Jones industrial average, the Standard & Poor's 500-stock index, and shares of its U.S. rivals. Investors are rewarding Ford for 10 consecutive quarters of earnings growth: The carmaker announced on Oct. 14 that it earned \$1 billion in the third quarter, a 10% increase. The rise was also in response to a parade of hot models. The latest, introduced on Oct. 20: a retro-styled Jaguar S-type sedan that goes on sale next year for \$48,000—a relative pittance for a Jag.



SUNBEAM'S PROFITS GO BEHIND A CLOUD

OOPS: SUNBEAM ANNOUNCED on Oct. 20 that it actually earned \$52 million in 1997, not the \$123 million first reported. Ex-chairman Al Dunlap, ousted last summer, had extolled the original results as evidence of his turnaround. Sunbeam also said the company under Dunlap had understated the red ink for 1998's first quarter. Dunlap says in a statement that he had no involvement in accounting matters and that the results had been reviewed by the board's audit committee.

HE BAGS \$1 BILLION IN GROCERY SALES

RONALD BURKLE STARTED HIS career as a grocery bagger. Now, he's carrying off big bags of money from back-to-back deals. Burkle, chair-

HEADLINER: DAVID COULTER

WHY BofA'S PRESIDENT IS OUT

David Coulter, 51, stunned Wall Street when he announced on Oct. 20 he was stepping down as BankAmerica president. But some insiders say the departure was no surprise.

Sanford Robertson, an ex-BankAmerica board member and Coulter's longtime friend, says that ever since NationsBank announced its merger with BofA last spring, it was clear that the Charlotte (N.C.) giant wanted more control. That put Coulter in jeopardy: Many had seen him as in line for the top job when ex-NationsBank chief Hugh McColl Jr. retires as BofA

chairman and CEO.

Neither Coulter nor McColl would comment beyond expressing shared regret. But Robertson says plunging quarterly earnings, largely due to a \$372 million write-off of a \$1.4 billion loan backed by BofA under Coulter for hedge fund D.E.

Shaw, provided the ammo McColl and his board needed. "I thought they would look for their opening to get rid of Dave, and they saw with D.E. Shaw," says Robertson. Industry sources say other heads may now roll—especially those close to the old BofA.

By Linda Himelstein



man of Fred Meyer Stores, sold the 14% stake that his Yucaipa Management holding company had in Dominick's Supermarkets to Safeway for \$1.85 billion. Then, on Oct. 20, Burkle sold Fred Meyer to Kroger in a \$13 billion deal. Burkle's take: about \$1 billion in stock and cash. But the paper billionaire isn't about to retire. He is a major Democratic Party fund-raiser, and he's part of the group assembled by former agent Michael Ovitz to land a football franchise for Los Angeles at an Oct. 27 NFL owners' meeting.

A TIDAL WAVE OF GOODS FROM ASIA

THE LONG-FEARED ASIAN import surge may be hitting the U.S. On Oct. 20, the government reported a record \$16.8 billion trade deficit for goods and services for August. That put the

deficit on track to hit \$18 billion this year, up from 1997's \$110.2 billion. The deficit with the Pacific rose to \$15.7 billion, up from \$11.7 billion a year ago. Steel imports were up 10% in dollar terms over the eight months of 1998 and estimated 24% in volume according to industry estimates. Meanwhile, U.S. exports dropped to \$20 billion, the lowest in 18 months.

ET CETERA...

- Healtheon pulled planned IPO, raising \$40 million from private investors
- PeopleSoft shares fell 2% after it said strong competition would hurt sales growth
- Dr. Jane Henney was confirmed by the Senate as new FDA Commissioner.
- Korea agreed on Oct. 20 to lower numerous import barriers to its auto market.



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T'S REVENGE OF THE NERDS IN CAPITOL HILL

While most of Corporate America waded through the legislative swamp of the 105th Congress and emerged empty-handed, Silicon Valley staggered under its bundle of victories. In the closing days of the session, tech won visas for skilled foreign workers, a ban on new Internet taxes, and curbs on the class actions that have been the bane of many startups.

And with the Valley's ability to exert pressure on both

sides of the aisle, high-tech representatives will be on the front lines again next year. One top priority: ending the long debate over industry attempts to lift export controls on data-scrambling technology. Computer makers will push for a relaxation of rules on overseas sales of supercomputers. California Republican Representatives Christopher Cox and David Bonior want companies that solve their Year 2000 problems to be shielded from age suits if glitches occur. And industry execs may urge Congress to give tax breaks to companies that solve their Y2K troubles.

POT. The tech industry, relative newcomer to the Washington political game, exploded onto the scene this year, says analyst Jennifer Clapp at the nonpartisan Center for Responsive Politics (CRP). "It will be a huge year in 2000." No small reason is the fast-building economic clout of the digital age. "Members increasingly recognize the connection between a strong high-tech sector and a strong economy," says Senator Spencer Abraham (Mich.), chief sponsor of the bill that raises visas for foreign workers from 65,000 to 115,000 in 1999 and 2000.

But Silicon Valley has other attractions for politicians—such as thousands of millionaires and a sprinkling of billionaires can shower megabucks in campaign cash. During the 18-month period that ended on June 30, the CRP estimates, the industry ponied up \$5 million in donations to candidates and two parties. That's up from \$2.8 million during the same period in 1993-94, the last midterm election season. Split evenly between Democrats and Republicans, tech's contributions are still small change compared with the dough the energy and financial-services industries kick in. But

tech checks approach the \$6 million in political giving forked over by Big Tobacco. And in an industry packed with wealthy businesspeople who have yet to wade into the political waters, the potential for more tech donations is enormous.

Already, tech companies are among the top 50 donors of unrestricted cash to the parties. As of June 30, Microsoft Corp. was No. 44 on the GOP's soft-money list, at \$264,316. It gave Democrats just \$95,000. The Dems have bragging rights to Oracle

Corp., their

EYE OF NEWT: No. 25, thanks *The Speaker* to donations with 3Com's of \$220,463, *David Hurwit* vs. \$20,000 to Republicans.

No lobbying group appears to be exploiting this confluence of interests better than Technology Network, a 15-month-old political action committee formed by such big shots as Cisco Systems CEO John Chambers and Netscape CEO James Barksdale. The typical trade association crafts a broad legislative agenda first, seeks supporters on the Hill, and then rewards them financially. TechNet starts by forging one-on-one ties with influential lawmakers and then asks for help on a limited agenda.

The more than 100 briefings and fund-raisers TechNet has held since its inception, often at the homes and offices of its members, let Democratic and Republican lawmakers mingle with the moguls—and collect checks. Says a top GOP Senate staffer: "Who's going to say, 'I don't want to meet with

Bill Gates or Andy Grove?'" TechNet President Reed Hastings isn't bragging when he says: "We have a winning hand."

That's because techies play poker with both parties. They appreciate the GOP's mantra of smaller government and lower taxes. But they also like the New Democrat message of fiscal responsibility and federal support for research and education. High tech is "a jump ball," says Republican consultant Ralph Reed. And therein lies its power to influence legislation.

It wasn't so long ago that issues such as Internet taxes, the Year 2000 bug, and encryption were dismissed by lawmakers as nerdtalk. But as Silicon Valley's economic and financial clout expands, it's getting hip to speak geek in Washington.

By Amy Borras



SILICON VALLEY SWEEP

The 105th Congress has been pretty much a bust for business—unless your business is high tech

IMMIGRATION More visas for skilled foreign workers

INVESTOR LAWSUITS Tighter limits on when shareholders can sue after stock prices plunge

INTERNET TAXES A three-year ban on new taxes

ONLINE COPYRIGHTS Piracy protection for software, music, and literary works on the Internet

TAX CREDIT Extends tax credit for research and experimentation through June 30, 1999

YEAR 2000 Protects companies from lawsuits based on information they share about methods to solve the bug

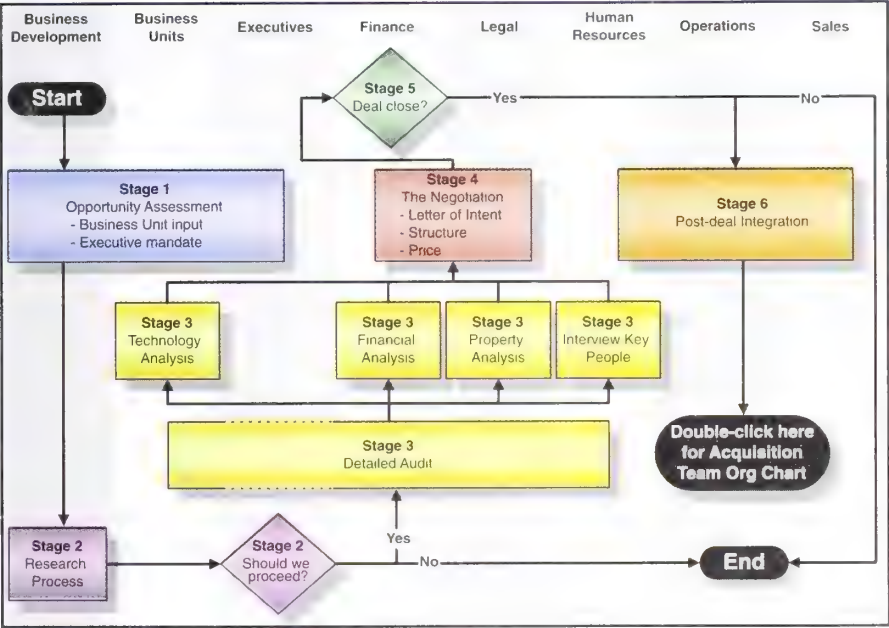
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INTERNET

EUROPE'S PRIVACY COPS

The EU wants others to protect electronic data as it does

Germany's data police, the *Datenschutz*, considers itself a kind of anti-Gestapo. Whereas Hitler's secret police used files on German citizens as tools of terror and control, *Datenschutz* protects people's personal data. Inspectors trek from Berlin to Sioux City, S.D., to Citigroup's giant data-processing center, where computers store financial information about millions of German credit-card holders. The Germans, says Stefan Walz, a *Datenschutz* commissioner, pay regular visits to make sure that the data are being handled according to [German] law. "If a company accepted the supervision four years ago in return for permission to issue a credit card in Germany. But U.S. companies could be dealing

with Europe's privacy inspectors whether they've bargained for it or not. On Oct. 25, when the European Union Directive on Data Protection goes into effect, commissioners in Brussels will have the legal tools to prosecute companies and block Web sites that fail to live up to Europe's exacting standards on data privacy.

The directive, which was negotiated among the EU governments over six years, guarantees European citizens absolute control over data concerning them. If a company wants personal information, it must get that person's permission and explain what the information will be used for. It must also promise not to use it for anything else without the citizen's consent. A company

selling birdseed, for example, can't use its mailing list to hawk Audubon calendars. Citizens have the right to know where information about them came from, to demand to see it, to correct it if wrong, and to delete it if objectionable. And they have a right to file suits against any person or company they feel is misusing their data.

One piece of the law is particularly stringent. Article 29 demands that foreign governments provide data protections every bit as rigorous as Europe's, under a similar regulatory structure. Those that fail, the EU warns, could find their data flows with Europe, the world's largest economy, outlawed.

EU officials maintain that they would target certain companies or industries,



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The cross-marketing ban means a birdseed company can't use its mailing list to hawk Audubon calendars

entire nations. Yet the new directive marks the first concerted initiative of the European Union to dictate its norms to the rest of the world. It also takes Europe's regulatory reach into the vital areas of the Information Economy—computer databases and the Internet. The global system requires global regulations," says Walz.

The question is whether governments of Europe will stand for the law. The global leader in online business, the U.S. is a particular target of the directive. So Washington finds itself negotiating on behalf of the entire non-European world.

At the root of the battle is a philosophical chasm nearly as wide as the Atlantic. Europeans look to democratic principles to protect their privacy. Americans, meanwhile, tend at first to leave information flows unregulated. Later, they slap controls on objectionable areas—such as child pornography on the Internet. "In Europe, people don't trust companies, they trust government," says Daniel Kohnstamm, a Time Warner vice-president in Brussels. "In the U.S., it's the opposite way around: Citizens must be protected from actions of government."

GLOBALIZATION. Data exchange, already a critical issue for business, is a key to marketers' global ambitions. The plan is to plumb databases of buying patterns, develop thousands of detailed customer profiles, and then hit consumers with finely tuned pitches—increasingly online. This targeting is at the heart of E-commerce, an industry that totals only \$32 billion in annual sales now but is expected to reach \$425 billion within four years, according to International Data Corp. Execs on both sides of the Atlantic fret that it could be strangled in its cradle by zealous regulators. "This could mean the Balkanization of E-commerce," warns John E. McKelvey, European legal counsel for Microsoft Corp.

Europeans respond that E-commerce will grow without consumer confidence. A fearless or foolish consumer, they would venture into unregulated digital malls. Europeans abhor the American habit of planting "cookies," the data that hook into a log-in name, track Web sites it has explored, and send up consumer profiles. They are outraged that U.S. prosecutors and insur-

ers use the Web to unearth facts that people would rather keep to themselves. Brussels claims it can protect Europeans from such intrusions.

As Oct. 25 approaches, negotiators in Brussels and Washington are working to reach a practical compromise. The Europeans have dropped demands for a new privacy department in Washington. And the U.S. team, led by Commerce Under Secretary David L. Aaron, is proposing a self-regulation scheme that has the backing of blue-chip companies from Procter & Gamble Co. to Microsoft. Companies would certify before a nongovernmental privacy group that they are meeting European standards on data management, much as companies worldwide meet European industrial-quality standards with the ISO 9000 certification.

The betting now is that Americans will offer at least enough to forestall a rash of European legal actions this fall. "We won't shut off the general flow of data," says one European Commission official in Brussels. "We will judge on a case-by-case basis and bring suit if necessary."

But even as EU officials promise restraint, privacy activists in Europe are preparing to go after U.S. companies that violate the new directive. Privacy International, a London-based advocacy group, says it is investigating privacy practices at 25 leading U.S. companies, including Electronic Data Systems, Ford, Hilton International, Microsoft, and United Airlines, and vows to sue alleged offenders in January. That would force EU regulators to take legal action, too. For their part, the target companies say they are hurrying to meet Europe's new privacy requirements.

That has created opportunities for software makers and other high-tech companies. Microsoft, for example, is developing programs to quiz consumers,

through a series of pop-up menus and mouse clicks, about what products or services they want and how much data they're willing to share. NCR Corp., a major producer of data-storage software, is marketing a host of new products to meet privacy needs, allowing companies to juggle digital warehouses of consumer data. For example, a user would have access to personal information for benign purposes, such as anonymous market surveys.

But the same user could not access that data to launch a direct-mail campaign for a new product—unless consumers had given the O.K. for such pitches.

PRICED RETOOL. Companies that rely on cross-selling are scrambling to comply with the new rules. Airlines, for example, pitch their first-class passengers everything from limousine rentals to bargains on luxury suites. Now, such cross-marketing is forbidden without the customer's consent. British Airways PLC has been revamping its software to ask questions the right way—explaining to customers why it wants birth dates (to distinguish one John Smith from another) and nationalities (to whisk people through immigration). "We haven't even put a cost on that yet," says BA data-operations executive Tricia Ade.

It may seem ironic that Europe, which is playing catch-up in the entire digital arena, from personal computers to E-commerce, has taken the lead in policing data on the Internet. But privacy is a burning issue of the New Economy and one that cries out for regulation. The question is whether together, Europe's regulators and America's free marketers can devise a scheme to patrol the Net without dragging it down.

By Stephen Baker, with Marsha Johnston, in Paris and William Echikson in Brussels

HOW THE NEW LAW WILL CRAMP SALES STYLES

► No company will be able to transmit personal data about European Union citizens to countries whose privacy laws don't meet European standards

► Companies will have to show customers their complete data profiles on demand and make all changes that customers request

► Web-site owners will not be able to use data tags known as "cookies" to track customers' preferences and movements without their permission

► Cross-marketing without customer permission will be illegal

DATA. BUSINESS WEEK

COMMENTARY

By Thane Peterson

BANKERS TRUST IS THE LAST THING DEUTSCHE NEEDS

For months now, Deutsche Bank chief Rolf E. Breuer has been telling anyone who would listen that his bank might buy a major U.S. investment bank. "If we see opportunities, we'll seize them," he says. And now that the emerging-markets crisis has caused U.S. bank stocks to plunge, cash-rich Deutsche Bank appears ready to start doing a little bargain-hunting: Deutsche has held preliminary talks to buy troubled Bankers Trust Corp., whose capitalization even now is barely above its \$5 billion net asset value. On Oct. 20, the share price of both banks jumped on speculation about a possible deal.

It's strange that Deutsche Bank's shares would rise: In German financial circles, even the idea of such a bid is seen as evidence of just how badly Germany's biggest bank is floundering. Its investment-banking strategy is in tatters, and there are widespread rumors, which are denied by the bank, that it has suffered huge trading losses as the financial crisis and U.S. rate cuts have caused German government-bond spreads to widen unexpectedly. Even with deal rumors giving them a boost, Deutsche's shares are trading at not much more than their net asset value. And its top management is deeply divided.

ORDER AT HOME. Indeed, outsiders speculate that Deutsche may be considering a troubled target because its management couldn't survive the takeover of a stronger bank—say J.P. Morgan & Co., which it is also said to have considered. "A reverse takeover of Deutsche by Morgan would make a lot more sense than buying Banker's Trust," snipes a consultant who has worked with Deutsche. In reality, the last thing Deutsche needs at this point is to take over a troubled bank. Analysts estimate it has poured at least \$3 billion into its own investment bank during the past decade and still hasn't gotten it right. Rather than making bold moves in the U.S., Deutsche Bank should be getting its house in order at home.

Deutsche could take a lesson or

two from German behemoth Daimler Benz, in which the bank has a 22% stake. Back in the early 1990s, Daimler too seemed troubled. But a management shake-up and concerted restructuring got it back on track. Now, it's within days of completing one of the most daring deals in German history, the \$88 billion merger with Chrysler Corp. In this case,



BREUER'S FOLLY?

Over the past decade, Deutsche has poured \$3 billion into its investment bank, to little avail

there's no doubt about which company is running the show: It's Daimler CEO Jürgen Schrempp and his team, even though Chrysler's management is also strong.

Unlike Daimler, however, Deutsche Bank is moving too slowly to shake itself up inside Europe. That's why most analysts have little hope that Breuer's plan to raise pretax return on equity to 25% by 2001 will succeed, especially with emerging-market losses now crimping returns. The bank needs to cut deeper, by shuttering several hundred of its 2,288 branches—a move it has so far resisted. It also needs to give up on the mergers and acquisitions end of

its investment bank for now. That's a field where it has consistently failed despite doling out huge bonuses to lure talent.

One good sign is that Deutsche seems to be quietly bolstering its management ranks. Michael Endres, the board member who oversees the bank's back-office operations, is leaving at yearend. Ex-colleagues say that Ronaldo Schmitz, a board member partly responsible for investor banking, has had his duties cut back. The bank, however, denies rumors that he, too, will leave. Endres is expected to be replaced by Hermann-Josef Lamberti, 42, an ex-IBM executive. Deutsche's investment bank is now run by Josef Ackermann, brought in two years ago from Crédit Suisse. He is widely seen as possible heir to Breuer, 60, who is expected to retire in 2002. But the bank badly needs more outsiders to challenge its stuffy consensus management system. Non-Germans with investment-banking experience should get top priority.

OPAQUE BOOKS. Finally, Deutsche Bank needs to take a more open approach to shareholders. In contrast to Daimler, which won the confidence of investors by adopting U.S. accounting standards, Deutsche's financial reporting remains relatively opaque. Analysts fear Deutsche Bank would have to pay cash for a U.S. acquisition, while Daimler was able to do a share deal for Chrysler, partly because its shares are listed in the U.S. To raise money, Deutsche Bank might have to sell some of its \$23 billion in industrial holdings. That would require the bank to pay Germany's 50%-plus capital-gains taxes. Opening its books wider and increasing profits, as Daimler has done, would be a cheaper option in the long run.

Of course, Breuer is right to go looking for opportunities. But the place he should be looking first is his home market. And the best model to follow is probably not flashy U.S. investment banks but the maker of his chauffeur-driven car.

Frankfurt Bureau Manager Thane Peterson covers European finance.



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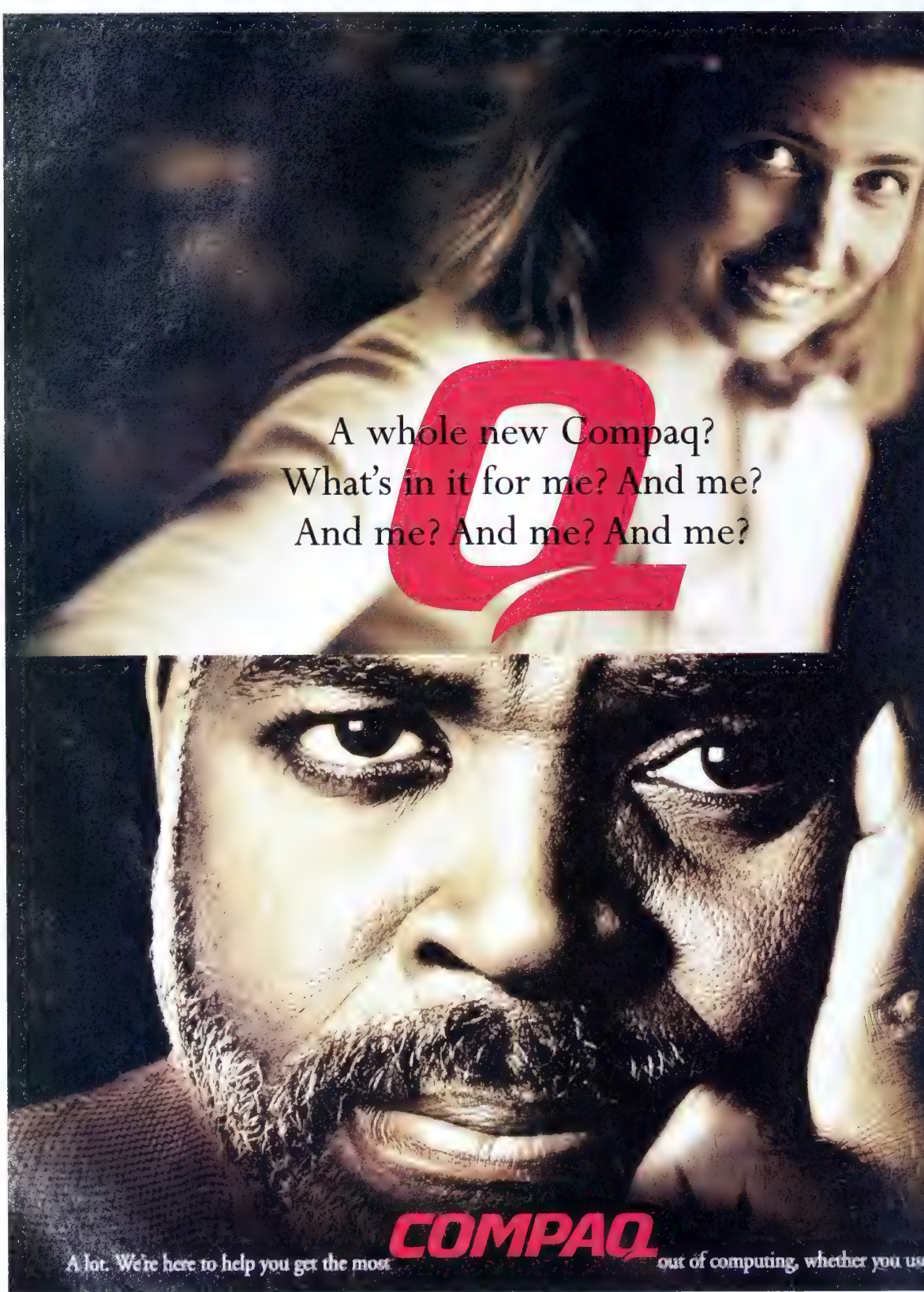
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A woman with blonde hair is smiling in the background. In the foreground, a close-up of a man's face with a beard and intense gaze is shown.

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JAPAN

NISSAN IS BACK IN THE MUD

The carmaker has restructured. Yet it's losing money. Why?

First we break even, then we make a profit. That was the simple plan of Yoshikazu Hanawa, president of Nissan Motor Co. In 1997, Japan's No. 2 carmaker posted a loss of \$122 million on worldwide sales of \$57 billion—and many investors hoped that the worst was over. He had ambitious plans to cut administrative staff, build more models on fewer chassis, and streamline research and development. Good news seemed in sight.

Not so fast. Instead of reaching breakeven, Nissan now risks a 1998 loss much larger than last year's figure. Japan's stock market slide, marketing setbacks, and recessions in Japan and Asia are all combining to thwart Hanawa and deal him another setback. He says he's satisfied with Nissan's progress. But Nissan's problems may be so deep-rooted and Japan's financial crisis so severe that a healthy rebound may elude the company.

Nissan is now in its sixth year of trying to turn itself around. Problems started in the mid-1980s. In Japan, Nissan's engineers simply lost touch with what consumers wanted, rolling out dowdy sedans that didn't sell. In the all-important U.S. market, Nissan repatriated profits while Toyota and Honda reinvested them.

DEBT DILEMMA. Hanawa, who has been president since 1996, has done a lot. To raise cash, he has sold shares in subsidiaries unrelated to Nissan's core business of making cars and has even sold off Nissan's crown jewel—a swank 16-story headquarters in the chic Ginza district of Tokyo—for \$125 million. To cut costs, he has slashed inventories by 100,000 vehicles in North America.

But that won't be enough. The company is saddled with \$22 billion in debt and is running out of banks to borrow



AUTO MAKER BESIEGED

BIG LOSSES

Nissan may report a loss this year of \$626 million, thanks to big losses in its stock portfolio. That's five times last year's loss.

FIRE SALE

To raise badly needed cash, Nissan is selling its stake in an ad agency, its Ginza headquarters, and its Australian finance firm.

BIG DEBT

Total debt is still \$22 billion. Top priority is to cut it.

DATA: BUSINESS WEEK, COMPANY REPORTS

from. Meanwhile, Nissan sales are dropping. On Nov. 10, the parent company is expected to announce a \$289 million net loss for the first half of the fiscal year ending next March. According to some analysts, Nissan's losses could reach \$626 million for the full year.

Ironically, the same cross-shareholdings that once propped up Nissan are starting to choke it. If not for the stock

market crash, Nissan would have turned a profit in the first half. But the tumbling Nikkei blindsided Nissan with \$1 billion in securities-valuation losses in its holdings, including stakes in struggling Fuji Bank Ltd. and Industrial Bank of Japan Ltd. "If share prices continue to go down, it's a huge problem for Japan, not just Nissan," says Hanawa.

Yet the root of Nissan's problems remains unchanged: marketing. Nissan's

SQUEEZED: failure to meet consumer preferences in the U.S.

a case in point. Last year, the U.S. operation posted a \$787 million loss, which put the parent company in the red. Nissan's U.S. sales are down 18% in the first nine months of this year, to 475,000 vehicles, while Toyota's sales are up 7% and Honda's have risen 8%. While Toyota and Honda are offering little by way of rebates, Nissan is giving buyers \$2,000 on all models.

Nissan's greatest

opportunity may be at home, however. To do it, the company has new models on the way. In October, Nissan launched its \$13,565 Sunny sedan, outfitted with a safer frame; buyers can also choose from several fuel-efficient engine options. The company plans to use the same chassis to roll out 10 other new models of cars and minivans worldwide.

IMAGE WOES. Nissan is not in immediate danger of collapse, of course. But Hanawa may have to make some painful decisions. Nissan closed one of its plants in 1995 and may have to close more. It's now operating below the critical threshold of 70% capacity. "Unless they shut down a plant, no matter how much debt they reduce, they can't make money," says Koji Endo, auto analyst at Schroders Japan Ltd.

For now, the company suffers from an image problem so severe that Japanese newspapers have run satirical poems from readers poking fun at the once-treasured carmaker. Investors are losing faith, too. Since Hanawa unveiled his latest restructuring plan, Nissan's share price has tumbled to \$2.71 from \$4.71. Hanawa's goals seem to grow more elusive every year.

By Emily Thornton in Tokyo, and Kathleen Kerwin in Detroit and bureau reports

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heavy lifting begins.**



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EDITED BY JOHN TEMPLEMAN

IF BIG OIL PUMPS IN CASH, WILL IT SOLVE SAUDI WOES?

American policymakers have long seen Crown Prince Abdullah as a dark horse in the solidly pro-American ranks of senior Saudi princes. Abdullah has tougher Arab nationalist views and is the point man with hard-line Arab leaders such as Syrian strongman Hafiz al-Assad. But his two-week visit to the U.S. through Oct. 13 dispelled any lingering notion that he could be a threat to U.S. interests in the Middle East.

Abdullah, a born economic conservative, has good reasons to pay court to Washington. The Saudi economy is slumping badly, and he needs huge investment from global oil giants to get it back on track. Abdullah needs to shore up public finances, reeling from the 60% collapse in oil prices since 1996. Recent government measures, such as the unprecedented public-sector hiring freeze and the across-the-board budget cutbacks, have done little to stem the mushrooming public deficit, which could reach \$8 billion this year. The economy, on the other hand, says Jeddah-based National Commercial Bank, could shrink by as much as 5%.

Ever since he started taking over day-to-day responsibility for government from his half-brother King Fahd, who suffered a stroke in 1995, the buck stops with Abdullah. So far, Saudi Arabia has avoided an Asian-style panic. An August speculative attack on the Saudi riyal, pegged for decades to the U.S. dollar, was quashed through the swift intervention of the Saudi Arabian Monetary Agency. While the counter-attack worked, it carried a hefty price tag: Riyadh is awash with rumors that the country quietly took out an emergency \$5 billion loan with its tiny but cash-rich neighbor Abu Dhabi. **POWER SHIFT.** Saudi Arabia's tightening financial vise explains why Abdullah is putting out the welcome mat to foreign oil companies and their vast investment budgets. In an extraordinary Sept. 26 meeting in Washington with seven U.S. oil companies—Mobil, Texaco, Exxon, Chevron, Arco, Philips Petroleum, and Conoco—he unexpectedly invited them to propose how they could help develop the 260 billion barrels of crude oil reserves under Saudi sands, fully a quarter of the world's total. Now the seven are racing to meet a Nov. 10 deadline to present schemes for Saudi hydrocarbons, from tapping enormous natural gas pools to enhancing oil recovery from aging giant oil fields.

The move could herald an epochal shift of power back to Big Oil—even if Abdullah and the Saudi leadership ask for only a fraction of what the companies may propose. Ever since Saudi Arabia, along with other Organization of Petroleum Exporting Countries members, nationalized its oil business in the early 1970s, it has jealously reserved all rights of oil exploration and production for its state-owned oil company, Saudi Aramco.

Although Saudi Aramco, the world's biggest oil company in reserves and production, has not escaped global economic turmoil. Exploration has ground to a halt, while senior executives have resigned. One problem: forced "Saudiization"—replacement of foreigners by Saudi nationals of Aramco's workforce after the Gulf War may have left the company both overstaffed and ill-equipped to use the latest technology.

Without fresh investment, the Saudi oil industry could be left out in the cold. Policymakers in Riyadh are already nervously eyeing production cuts being cut in Iraq by French companies such as Total as well as by Italian interests. "It will become operational as soon as international sanctions are lifted. Similarly, Iran is edging toward granting foreign companies access to its massive oil and gas reserves. "Given this scenario, what the Saudis are doing is decent forward



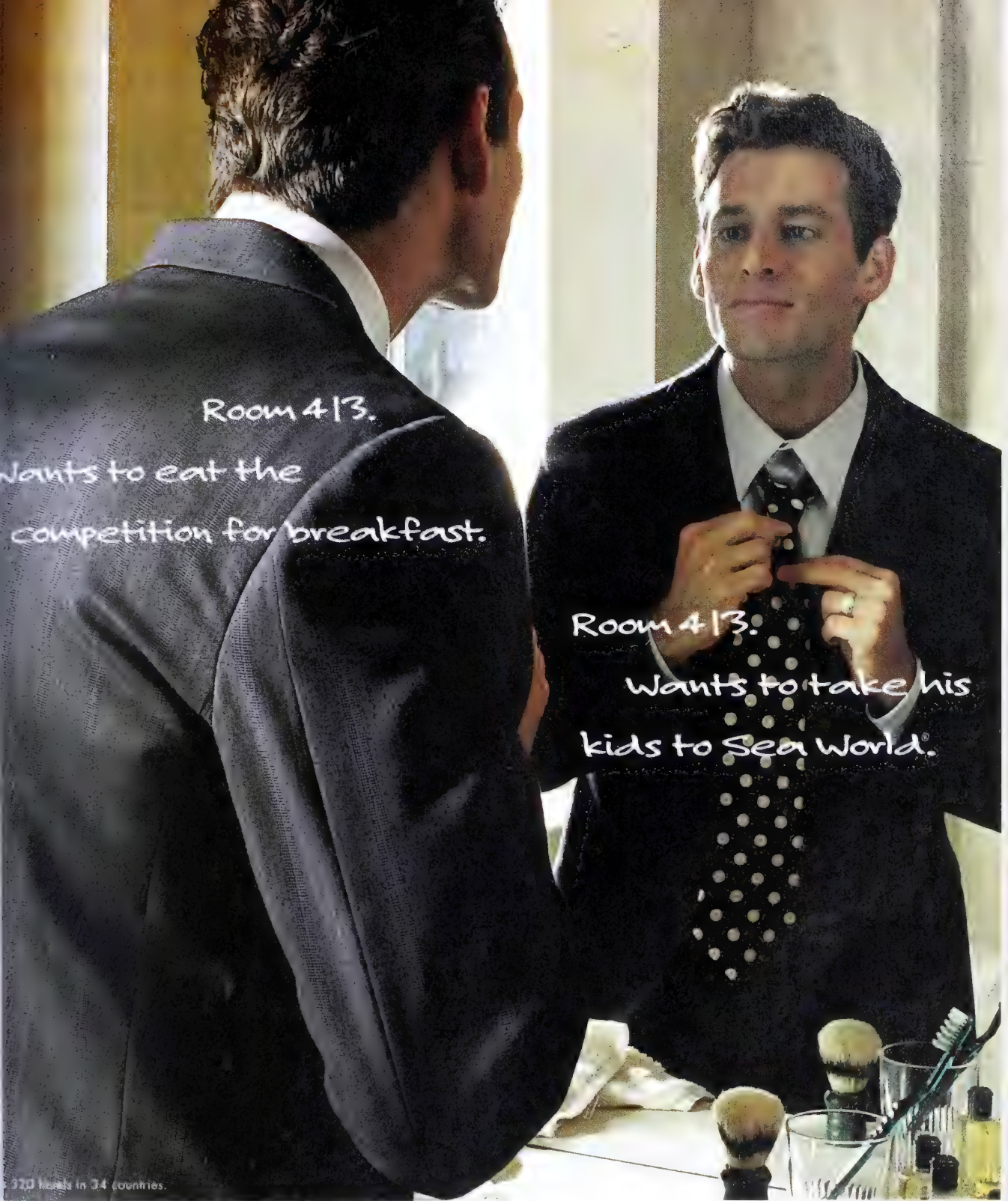
LOOKING FOR HELP: Abdullah's government is strapped

thinking," says Peter Gignoux, senior oil specialist at Salomon Smith Barney in London.

Allowing foreign, especially U.S., oil companies to tap Saudi Arabia's oil riches is political dynamite. A committee of senior princes and ministers has already been formed to review policy changes and allow Abdullah to take the pulse of Saudi opinion. U.S. Energy Secretary Bill Richardson is expected to press Abdullah further during a trip to Riyadh in December, the first visit by such an official since 1992. "What Abdullah really wants is options right now," says a Western diplomat in Riyadh.

Down the road, that could be good news for the U.S. oil industry—and Saudi Arabia. Provided he can steer through the present crisis, a determined Abdullah could eventually push through much needed reforms, from cutting high spending on military hardware to speeding privatization.

By John Rossant in C



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Pride Of Place

The second annual architecture awards celebrate the teams who created the world's best new work environments

It is the perfect tool for an era of austerity. It can transform aging industrial warehouses into sparkling new offices, use mundane materials to showcase the companies that sell them, build new factories that can produce just as much as older ones twice their size, generate the flexibility and teamwork necessary for global competition, or create brand new identities for traditional businesses—all at a minimal cost.

Architecture, associated in the past with grandiosity and richness, is showing a strong ability to deliver higher productivity and significant cost savings while still surprising with structures and spaces of stunning visual beauty.

This is why, for the second year in a row, the BUSINESS WEEK/*Architectural Record* awards, sponsored by the American Institute of Architects (AIA), celebrate the problem-solving strengths and bottom-line prowess of architecture. (Both BUSINESS WEEK and *Architectural Record* are owned by The McGraw-Hill Companies; the October issue of *Architectural Record* has its own write-up of the awards.) The contest focuses on the successful translation of business goals into architectural solutions and includes businesspeople on the contest jury. Olli Kallasvuo, president of Nokia Inc. and corporate executive vice-president of Nokia Americas, and Michael Basserman, chairman and chief executive of Mercedes-Benz of North America, served this year.

TRIAL SIMPLEX
An old warehouse
ripped and polished
with high-tech gleam



The trophies go to teams of clients and architects who together solved business problems that are at the heart of today's economy: restructuring, teaming, innovation.

With the global economy facing strong recessionary pressures, the imperative of growth, which was dominant for so many years, is quickly giving way to restraint. Many of the awards this year illustrate how archi-

tecture can facilitate that new approach. "Those projects that had budget constraints on them often had the more inventive solutions," says juror Charles Gwathmey, principal of New York-based Gwathmey Siegel & Associates Architects, a firm known for its high-end, modernist designs.

To ensure impartiality, the AIA chooses the judges and establishes the criteria, which include a business plan as well as architectural renderings. In 1998, there were 213 entries, up from 153 last year, with 186 coming from the private sector and 27 from the public. The largest category—89 entries—was for corporate headquarters and offices;

EYES ON THE PRIZE

Project entries in 1998 rose to 213

followed by manufacturing, research-and-development, and operations (24); entertainment (18);

and education (14). There were 74 new construction projects, 71 interiors, and 38 renovations. Some 45 entries had budgets under \$1 million and 69 under \$5 million. There were many larger-budget projects as well—42 over \$25 million, and 57 between \$5 million and \$25 million. Entries came from Europe, Asia, Latin America, Canada, and Africa, as well as the U.S.

What were the big trends in this year's contest? Try what one juror called "minimizing materiality," or the clever use of inexpensive, everyday materials to deliver low-budget but high-impact offices and factories. Glass and grass are a major theme. Award-winners QMR Plastics

Div. in Wisconsin, the San Francisco-based Gap Inc. headquarters, and *The New York Times*'s new printing plant all emphasize skylights and windows, for instance. The result: lots of natural daylight, a better working environment for employees, and savings on energy.

Grass is where the Green Movement meets the green eyeshade. Both the Regio Twente waste-transfer center in the Netherlands and the QMR Plastics plant in River Falls, Wis., use native grasses to landscape their buildings, please local communities, and save money. (Indigenous grasses need no irrigation and require little maintenance.) Gap has even put grass on the roof of its headquarters to create a thermal barrier, saving on energy.

AUSTERITY. Award-winner Praxair Inc., an Ankeny (Iowa) distributor of bottled industrial gases such as nitrogen and oxygen, actually celebrates its minimal materialism. By taking an old warehouse and exposing and polishing its metal ductwork and pipes, the architects created a workplace true to the industrial heart of the business, as well as a special place to work in.

Once it was rare for architects to be called in to design industrial facilities; not anymore. "These buildings make a lot of sense from a business point of view," says Bernardo Fort-Brescia, principal of Arquitectonica International of Miami. "Unlike the postmodern ostentation of the '80s, with its expensive, ornate marble and pretension, these winners have a style that makes sense and does not waste money." *The New York Times* saved \$100 million by using basic materials, a simple, rectangular building, and more efficient space in its new printing plant.

Teamwork is the second major theme to emerge from the contest. The new QMR Plastics building houses production, engineering, and management under one roof. Company officials want everyone involved in the manufacture and distribution of plastics to work together. Glass walls separate blue- and white-collar employees while making each visible to the other. Large, open spaces bring people together. The Praxair building, like QMR Plastics', is multiuse: It has a warehouse, offices, and training areas under one roof.

Gap's grassed roof covers what some might think of as a workers' paradise—light, airy spaces, windows that open to the fresh air, a gym with a pool, and a cafeteria with good food. But employees do pay a price: speed. Gap changes clothing lines many times annually, and architects built tremendous flexibility into the new head-

quarters. Teams assemble, break up, and reassemble to get the work out.

Awards also went to projects where managers wanted their offices to express core company values. Architecture made their buildings and work spaces tell a story about the business within. At Osho, a publisher of media dedicated to a meditative life, Daniel Rowen Architects created a serene yet dynamic Manhattan office space using light and long, uncluttered walls and hallways.



SNOW JOB

Architect Julie Snow's glass walls let QMR Plastics workers see the light—and each other

But architecture also can redefine the way a company operates. The award-winning Futures By Temps project remade the business model of the temporary-staffing agency by redefining its applicants as customers rather than job-seeking supplicants.

When the company was unable to meet corporate demand for computer-literate temps, its architects built a jazzy kiosk featuring Web-site-design imagery that attracted young, computer-literate people in malls who might be interested in temporary work.

One of the strongest architectural trends that showed up in both the 1997 and 1998 contests was the reuse of older buildings. Usually that involves retrofitting old warehouses or factories to make offices. But a Dutch winner this year goes one step further. Oosterhuis Associates designed an enormous waste-treatment shed that can be transformed into something entirely different in 15 years: a sports stadium. This persuaded the local community to accept a garbage landfill in their backyards.

Two architects won in both the 1997 and 1998 competitions: Julie Snow and William McDonough. Snow is building a reputation for designing light, open spaces that integrate blue-collar and white-collar work. McDonough is well-known for his environmental approach. This is just one of many trends appearing as the BUSINESS WEEK/Architectural Record contest evolves.

A more detailed look at the winners and why they won begins on page 64.

By Bruce Nussbaum in New York

BUSINESS WEEK / ARCHITECTURAL RECORD AWARDS 1998 JURY: MICHAEL BASSERMAN, Chairman and CEO, Mercedes-Benz of North America, BERNARDO FORT-BRESCIA, Principal, Arquitectonica International; SHERRI GELDIN, Director, Wexner Center For The Arts; CHARLES GWATHMEY, Principal, Gwathmey Siegel & Associates; WENDY EVANS JOSEPH, Principal, Wendy Evans Joseph; OLLI KALLASVUO, President, Nokia Inc., and Corporate Executive Vice-President, Nokia Americas; RODOLFO MACHADO, Principal, Machado & Silvetti Associates; JOHN O. NORQUIST, Mayor of Milwaukee; WAYNE M. REHBERGER, Vice-President for Planning, Analysis, & Administration, MCI WorldCom; CHARLES B. ROSE, Principal, Thompson & Rose Architects

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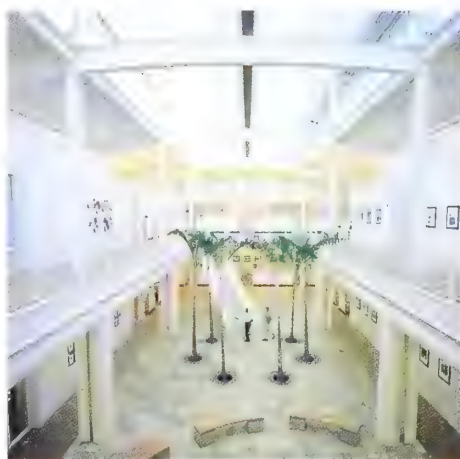


CHRYSLER CONCORDE

It's A Real Pleasure To Work Here



Gap Inc.'s new headquarters building is an employee's dream. In order to attract top people in San Francisco, one of the most competitive job marketplaces in the world, the giant retailer asked its architects to create a special space. The design team of William McDonough + Partners and Gensler created a 195,000-square-foot building broken into three large sections, each with its own skylit atrium. No workstation is more than 30 feet from daylight. There is a cafeteria and a full-service fitness center, featuring a lap pool. The windows can be opened, and grass covers the roof to provide a thermal buffer. To maximize office flexibility (Gap has nine fashion lines a year, and mobility is extremely critical), there is an under-the-floor system of ducts and wires for air, phones, computers, and electricity. Materials that the architects used include wood veneer harvested from managed forests, low-toxicity paints and adhesives, and formaldehyde-free particle board. A West Coast design solution for a West Coast business problem.



GAP INC. 901 CHERRY OFFICE BUILDING
San Bruno, Calif.

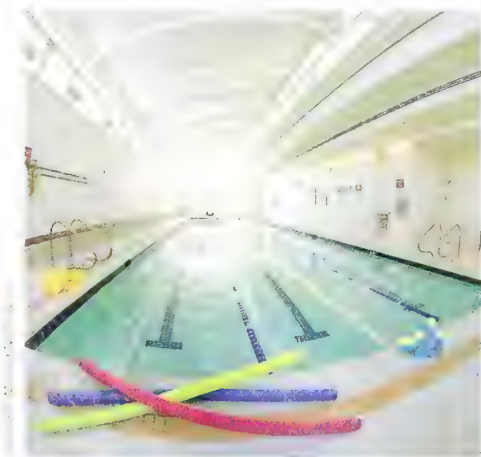
CLIENT
Gap Inc.

ARCHITECT
William McDonough + Partners; Gensler

BUILDING TYPE
Corporate headquarters

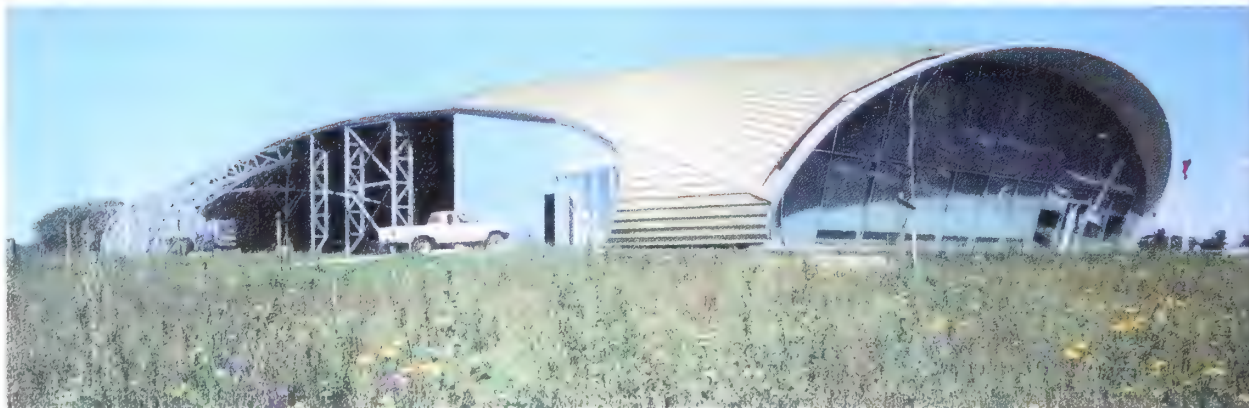
AWARD CATEGORY
Private sector, over \$25 million

Helping to attract top employees in the competitive Bay Area job market are Gap's skylit atriums (above), the fitness center's lap pool, and a cafeteria





Plenty of daylight saves on electricity, and work areas grouped around courtyards give a feeling of community



Double Dutch Treatment



It sits on the flat Netherlands landscape like a zeppelin, a 469-foot-long softly sculptured shed that is, in fact, a huge waste-sorting plant. No one wants such a facility in the neighborhood, so the townsfolk of Zenderen turned to architect Kas Oosterhuis for a solution. The result is a structure whose graceful curves visually reduce its bulky size, allowing it to sit lightly on the landscape. The plant will

do its dirty job for up to 15 years—and will then transform itself into a stadium. F

now, the shed is built with one side open to accommodate a fleet of trucks bringing garbage to be sorted and hauled off to a nearby landfill. Once that landfill is topped off, however, the shed is designed to be closed step toward converting it into a sports stadium or concert hall. The Dutch architect managed to solve a delicate problem in a cost-efficient way that is also easy on the eye.

WASTE-TRANSFER STATION

Zenderen, The Netherlands

CLIENT

Regio Twente

ARCHITECT

Oosterhuis Associates

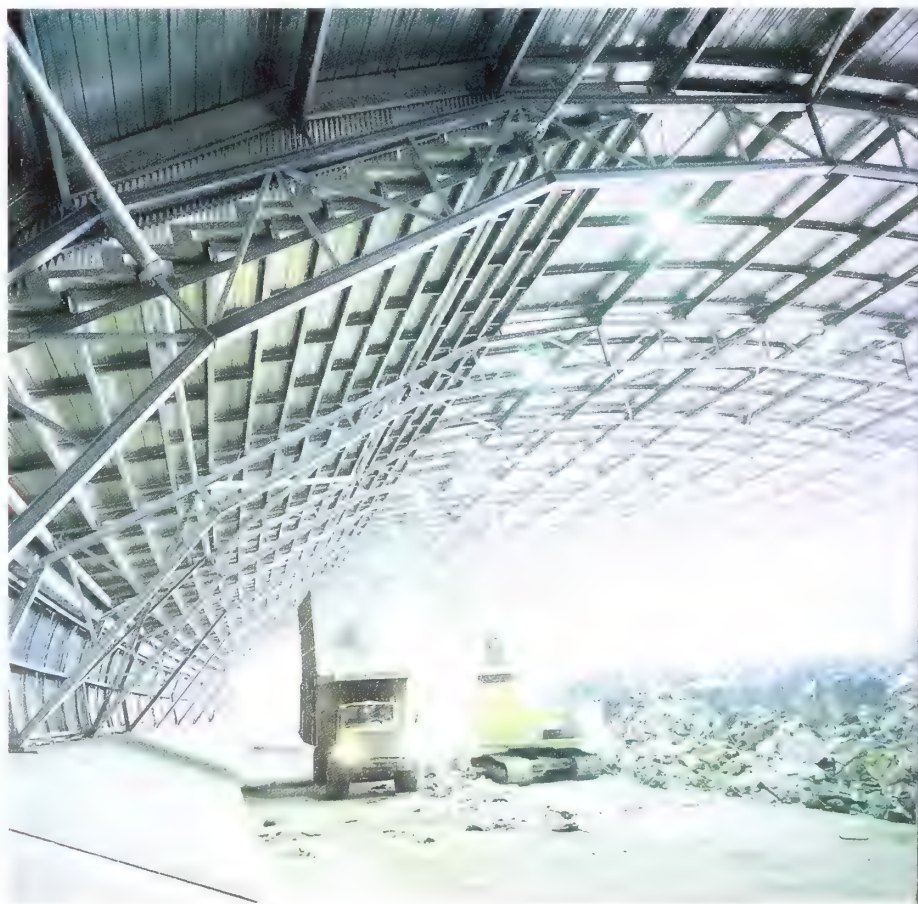
BUILDING TYPE

Waste-sorting facility

AWARD CATEGORY

Public sector, under \$5 million

To get local citizens to accept the waste facility, Zenderen built a plant that will be transformed into a stadium in 15 years



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A Concrete Solution



One function of architecture can be to showcase what a client is all about—in this case, concrete. In this low-budget headquarters for K.J. McNitt Construction in Oklahoma City, the architect embraced precast concrete construction and turned a building into a demonstration of just what the materi-

al can do. By finishing floors and walls to a smooth veneer, shaping the reception desk out of the material, and sculpting a distinctive concrete wall in the parking lot, Elliot + Associates Architects took technology normally used for infrastructure to create an intriguing workspace. Exposed, used oil-pipe bracing for the concrete panels reinforces the idea that inexpensive industrial materials can be used creatively. For \$400,000, the client received a 100-by-40-ft. headquarters that advertises the business within.



McNITT BUILDING
Oklahoma City, Ok.

CLIENT
K.J. McNitt Construction Co.

ARCHITECT
Elliot + Associates Architects

BUILDING TYPE
Corporate offices

AWARD CATEGORY
Private sector, under \$1 million

Elliot dressed up the parking lot with an imposing concrete wall (above) and used, exposed oil pipes as braces (left)





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Reduce Gas Explosion Risk

GAB ROBINS' ENGINEERING AND FIRE INVESTIGATIONS UNIT HELPS COMPANIES PREVENT GAS EXPLOSIONS AND REINFORCE THE SAFETY PROCESS.

Gas explosions in commercial facilities are usually avoidable, says Dr. O. John Jacobus, vice-president and chief technical officer of Engineering and Fire Investigations, a subsidiary of GAB Robins North America. Below, Dr. Jacobus shares some insights about the prevention of these terrible accidents.

Q: What causes the majority of gas explosions?

A: In my 20 years of experience, I have seen very few explosions caused by equipment failures. Most of these disasters are caused by simple human error. Let me give you an example. Almost 10 years ago, during scheduled maintenance in a refinery, some pipe was being checked for thinning of its walls from usage. The man who was asked to check a section of pipe didn't want to climb on some scaffolding to do the job properly. Apparently there were some inspectors around and he didn't want to go and get the proper safety equipment required for the climb. So he wrote down the thickness of the pipe walls from some 60 feet away.

Q: What happened?

A: Two days later, when the plant was started up, the walls of that piece of pipe failed and the rupture emitted a large cloud of gas before exploding. Including business interruption, the disaster

resulted in a \$1.5 billion loss for the company, and seven people were killed.

Q: How often do people make those kinds of mistakes?

A: This was a case of somebody cutting a corner, somebody not following instructions. Workers often cut corners, and get away with it. But they are taking huge chances by ignoring their training, because when there is an accident, especially in commercial and industrial settings, the costs and injury totals can be enormous.

Let me give you another example of an accident my team investigated. A worker was told to clean out a reaction vessel at a chemical plant, but he bypassed a number of safety features and procedures. Instead, he decided to open the valve on the tank with an air pressure device, and he couldn't get the valve closed again. The liquid inside the tank turned into a gas when it hit the

atmosphere. When the cloud reached source of ignition some 400 feet away, created an explosion that killed 27 people including the worker. The total cost to the company was more than \$1 billion.

Q: What can companies do to reduce the risk of human error or negligence?

A: Over the past 20 years, my group has investigated most of the major commercial explosions in this country. Because most of these were due to human failings, and not equipment problems, we have counseled companies that the best thing they can do to avoid accidents is to boost their training efforts. We tell them to constantly reinforce the training, to provide clear and large warning labels on equipment, and to hammer

home the importance of following safety procedures.

Q: How can companies drive home the dangers involved in cutting corners employees?

A: We tell companies to highlight actual accidents in their training sessions. We tell them to point out that these workers have killed and injured their fellow workers, and left others without jobs. We suggest that management ask workers how these kinds of disasters can be prevented; to make workers part of the safety process. I think, as awareness of the dire consequences of mistakes becomes known at all levels of the organization, the number of accidents in the country will decline.

Clara Van Hast, a New York-based writer, reports frequently on insurance and risk management.



Dr. O. John Jacobus,
Vice-President and
Chief Technical Officer,
Engineering and
Fire Investigations

Step-by-Step to Disaster

THE HUMAN FACTOR (based on a real series of events)

- 1 Inspector arrives at refinery for scheduled maintenance requiring certification of pipe wall thickness.
- 2 Rather than climb a scaffolding to accurately measure pipe thickness, he writes positive report based on "inspection" conducted from a distance of 60 feet.
- 3 Just days later, during plant start-up, this section of pipe fails, emitting a large cloud of gas which finds a source of ignition.
- 4 Results: Seven co-workers dead and more than \$1 billion in losses.

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The *Times* Building: It's Fit for Print



Using color, industrial materials, and imagination, *The New York Times* built an efficient printing plant and created a welcoming space for its employees. Polshek and Partners Architects

wrapped the *Times* logo around the building and used a wall of glass to reveal the presses inside. The effect is to advertise the newspaper to millions of motorists passing on a six-lane highway near LaGuardia Airport. Inside, lots of daylight, raised walkways, and a high-tech look define the cavernous, 515,000-square-foot facility. The building is half the size of its sister plant in New Jersey, which was built eight years ago. At \$350 million, the new one

cost \$100 million less but matches the other in output and quality. The *Times* wanted to use the process of designing the plant to foster a less contentious relationship with its nine unions. Three hundred employees contributed ideas. The jury agreed they had something to say.

THE NEW YORK TIMES PRINTING PLANT

College Point, N. Y.

CLIENT

The New York Times

ARCHITECT

Polshek and Partners Architects

BUILDING TYPE

Printing plant

AWARD CATEGORY

Private sector, over \$25 million

The Times's logo marks the spot, while huge windows give passing motorists a view of the printing presses





Temple Of Commerce

How does an architect design a space for a business that produces books, tapes, and videos dedicated to an Indian philosopher who urges a meditative approach to life? That was the challenge Osho International gave to Daniel Rowen Architects. The solution is an elegant, serene, 2,500-square-foot headquarters, full of light and space. The company wanted to consolidate its offices around the world in an environment that was contemplative yet productive.

Long, clean, vertical lines and modern materials work toward that end. Cabinets and records are hidden. A translucent, acid-etched glass wall visually quiets the main area. The layout of offices was designed for maximum flexibility, reflecting Osho's nonhierarchical organization and its belief that creative solutions come from a process of "unfoldment." Publishing and multimedia clients like the space so much that they prefer to hold meetings there rather than in their own offices. The budget, including the furniture and the fees for the architect, was \$750,000.

Elegant, serene, full of light and space—Osho International's New York headquarters are well-suited to a business devoted to the meditative life

OSHO INTERNATIONAL OFFICES

New York

CLIENT

Osho International

ARCHITECT

Daniel Rowen Architects

BUILDING TYPE

Corporate headquarters

AWARD CATEGORY

Private sector, under \$1 million





A tribute to the Industrial Age resulted when Praxair transformed an old warehouse in Iowa

PRAXAIR DISTRIBUTION CENTER
Ankeny, Iowa

CLIENT
Praxair Distribution

ARCHITECT
Herbert Lewis Kruse Blunck
Architecture

BUILDING TYPE
Processing and distribution center

AWARD CATEGORY
Private sector, under \$1 million

Beauty And The Basics



Storing and transporting bottled gas is heavy industrial work, pure and simple. Praxair Distribution, working with Herbert Lewis Kruse Blunck Architecture, decided to celebrate this fact and transform a warehouse into a polished-iron tribute to the Industrial Age. Exposed ducts, gleaming pipes, and metal studs give the workplace a distinctive identity. A long skylight slices through the building. A 28-foot-high cylindrical conference room dominates the space. The room is sheathed in two layers of perforated galvanized steel, which admits finely filtered light. The 58,000-square-foot warehouse was converted into a combined distribution and office space for only \$45 a square foot. A great example of using inexpensive materials to build an innovative and beautiful working space.



No one ever said, "Today's another opportunity to be average."

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Herman Miller congratulates those who build the ladders. The innovators. The risk takers. The dreamers. The problem solvers.

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PART #325c

Asset Management



STORY #7:

Meanwhile, Back at the Ranch

PRETEND you're an IS manager with a mobile sales force of hundreds and an endless trail of computers, components and configurations to follow. It's your job to (somehow) control them all—much like a modern-day herdsman. But keeping track of steer is one thing. Wrangling notebooks is quite another.

[*"While they're roaming the range,
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[*"Asset Management is like branding our notebooks.*

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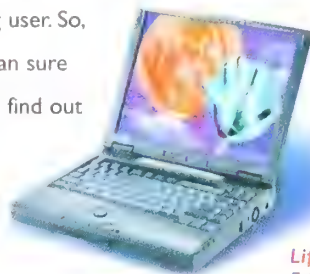
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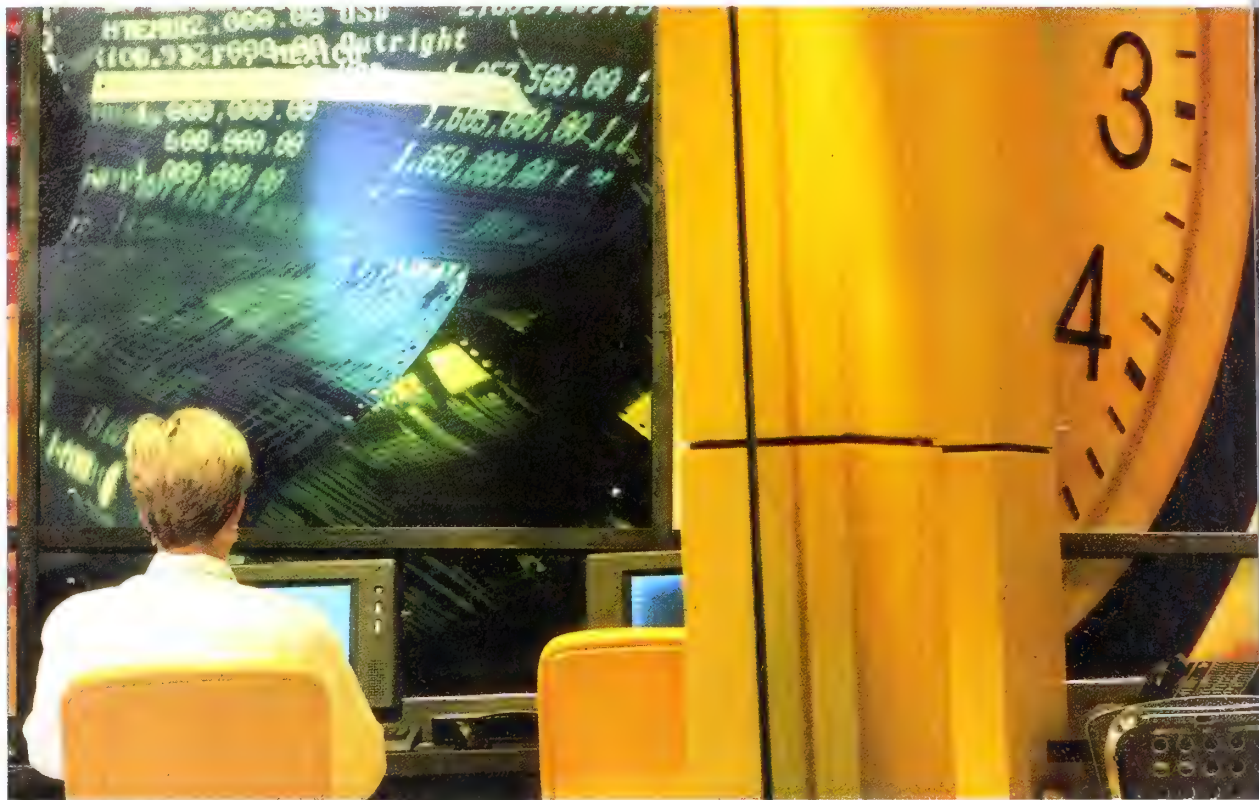
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**FUTURES BY TEMPS**

Reston, Va.

CLIENT

Temps & Co.

ARCHITECTAdamstein & Demetriou
Architects**BUILDING TYPE**

Retail

AWARD CATEGORYPrivate sector, under
\$1 million

A Recruitment Store That Pulls Them In



Sometimes, architecture can actually give a business a new identity. Take Futures By Temps. The temporary staffing and permanent placement service, facing a shortage of computer-literate, college-educated people, decided to "shop" for them in malls. For help, CEO Steven Ettridge turned to a firm with experience in restaurant design to create a 1,500-square-foot "store" that pulled in people as they strolled by. The idea was to treat applicants as customers and pursue them in high-volume retail areas. Adamstein & Demetriou Architects used visually rich architecture, interactive systems, and Web-site imagery to create a fun experience. Inside, the application area resembles a café more than an office. Testing and training spaces have a market feel, with bright colors and

metal canopies. It's the office atmosphere replaced by a Starbucks-like environment. Walk-in traffic is twice that of Futures By Temps's traditional offices. All for \$300,000 for the prototype, with future stores to go for half that.

Interactive systems (above) were used to create a fun environment, while the applications area borrowed ideas from café design



The Little Plant On The Prairie

Sitting in an 11-acre field of native prairie grasses, QMR Plastics Div. combined production, engineering, and management in a single facility. Julie Snow, an architect who has made a specialty of bringing together white- and blue-collar teams under one roof, designed a large open space. Different functions are separated only by a glass wall. Daylight pours into the workspace, and only glass separates the factory floor from the outdoors. Flexible spaces allow the company to increase production: Instead of running 12 injection-molding presses on two daily shifts, as older factories, it can accommodate 20 presses on three shifts. The local River Falls (Wis.) community is especially sensitive to the environment. By surrounding the building with indigenous grasses, QMR made itself welcome. Grass is also a low-maintenance landscaping medium, which saves money.

Bringing the woods and native grasses through glass walls improves life at the plastics plant



QMR PLASTICS DIV.
River Falls, Wis.

CLIENT
Quadron Corp.

ARCHITECT
James/Snow Architects

BUILDING TYPE
Manufacturing/office

AWARD CATEGORY
Private sector,
under \$25 million



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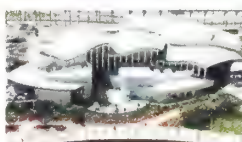


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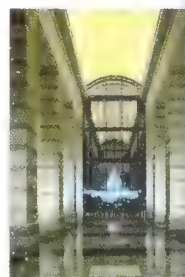


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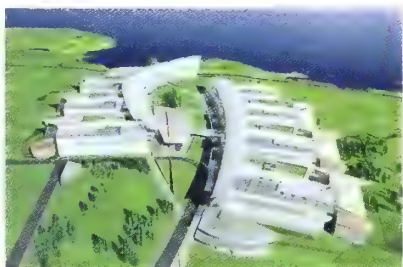
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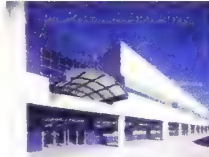
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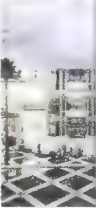
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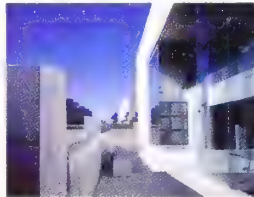
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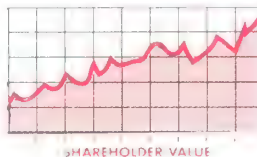
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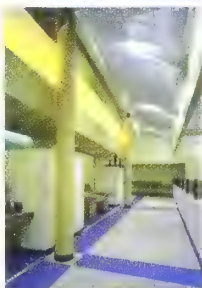


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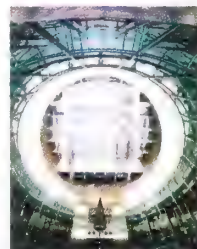
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BIG-SCREEN BABIES: The Rugrats Movie is slated for release on Nov. 20

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ROMANCING THE RUGRATS CROWD

Viacom is fighting hard to hold on to its lead in youth TV

When it comes to reeling in young TV watchers, it has been hard to beat Viacom Inc. Need to reach grade schoolers with our ads? Try the Nickelodeon cable channel, which has a near-stranglehold on the 2- to 11-year-old viewer. High school and college age? Go to MTV. Gen-X through boomers? VH1.

Trouble is, these days Viacom has plenty of company chasing those markets. Sports channel ESPN has been airing everything from spelling bees to snowboarding competitions. Time Warner Inc. is lacing teen hits *Dawson's Creek* and *Felicity* on its WB Television Network with full-length songs by acts like Hootie & the Blowfish and Savage Garden. At the lucrative children's end of the market, a crop of competitors, including Ted Turner's Cartoon Network and a revitalized Disney Channel, has been luring viewers away from Nick, Viacom's most-watched channel. "It's always a great thing to be the first in a market," says Anne M. Sweeney, president of Disney/ABC Cable Networks and former Nickelodeon executive. "What's more difficult is staying there."

To do just that, Viacom has been mounting an aggressive counter-offensive. Since 1994, when the alarm bells were sounded during a strategic review, Viacom has spent more than \$500 million—serious money in the rerun world of cable TV—to fight off its suddenly robust competition. And the music channels are staging a comeback. The average number of people watching MTV was up 15% in the 12 months ending in September, reversing two straight years of decline. And the much smaller VH1 saw its audience grow by more than twice that rate. Things aren't nearly as cheery at Nick, however. After almost doubling its viewing audience between 1993 and 1997, viewership is slipping, as more kids click away to the Cartoon Network, Fox Family Channel, or broadcast networks' kiddie fare (chart, page 91).

CASH OUTFLOW. In this crowded cable world, Wall Street is looking anxiously at the amounts Viacom needs to spend on new programming for its channels to stand out. In mid-September, two prominent analysts, citing added spending on cable and Viacom's Blockbuster Entertainment unit, cut their earnings



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Rivals like the WB network are poaching young viewers. Viacom's answer: A slew of new shows

estimate for the company. NationsBanc Montgomery Securities Inc. analyst John Tinker expects cash flow from the cable-channel unit to grow by 17% for the year, down from a 20% rise last year, and to slow to 13% growth next year.

Reversing that trend is critical to Viacom. MTV Networks this year will contribute 13% of the company's anticipated \$4.3 billion in revenue but 30% of its operating cash flow of \$2.5 billion. Moreover, notes Tinker, the cable unit and its 1% profit margins will represent even more of the company's fortunes as it completes the \$4.6 billion sale of its educational publishing unit to Pearson PLC and the planned spin-off of Blockbuster to the public. "They keep asking me to spend money," Viacom Chairman Sumner M. Redstone says of his MTV Networks programmers. "I hate doing it, but look at the results they're getting."

Central to that pending strategy is more original programming, particularly in the children's field. Nickelodeon spent \$350 million to build a 72,000-square-foot animation studio in Burbank, Calif., doubled the channel's animation staff, and will churn out up to 10 new shows this year to back up Nick hits such as *Blue's Clues* and *Rugrats*. In October, Nickelodeon also launched a \$2 million ad blitz, including an estimated \$10 million, one-month run of network spots on big draws like *ER* and *The Today Show*.

ATES CUT. The channel is also tapping audio expertise at Viacom's Paramount Pictures unit to bring *The Rugrats Movie* to theaters on Nov. 20. "Nickelodeon is clearly feeling the pressure, so they're reacting appropriately," says Tim Mandel, co-managing director at MediaCom, the media-buying arm of Grey Advertising Inc. One tactic: In an effort to stop defections among its advertisers, media buyers say Nickelodeon is offered to trim pre-arranged 1999 rate hikes in exchange for extending contracts with advertisers. Meanwhile,

the programming overhaul seems to be working. Boosted by new shows such as *The Wild Thornberrys*, ratings of Nickelodeon's 8 p.m. to 9 p.m. "Nickel-O-Zone" block is up 11% since September. "Even with all the competition out there, we're still getting more than 57% of the ad market," says Tom Freston, chairman of MTV Networks.

Viacom knows well the power of programming. Moribund VH1 was overhauled in 1995 by adding such new fare as documentary-style profiles of rock stars called *Behind the Music* and *Pop-Up Video*, which features irreverent captions in cartoonish balloons super-

imposed on music videos. A ratings revival at MTV began last year, after Viacom execs realized the channel had strayed too far from its music roots with a schedule heavy on game shows and dramas. The key to MTV's turnaround was the hiring last year of Brian Gradden, a 35-year-old former Fox programming exec who helped discover the

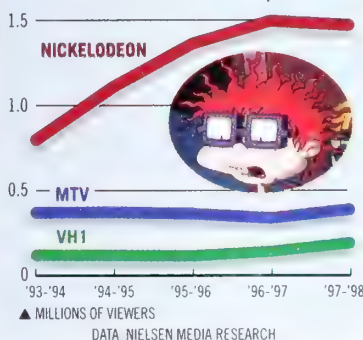
irreverent cartoon *South Park* for Comedy Central (jointly owned by Viacom and Time Warner). Gradden has refocused the channel on music with new shows like *Artist Cut*, where an artist describes the making of a song or video.

And the channels continue to go beyond straight video as they look for ways to attract viewers. For the first time, both MTV and VH1 intend to fashion their own made-for-television movies, including biographical features on former Beatles John Lennon and Paul McCartney and Latina singer Gloria Estefan. As long as such new fare can keep viewers tuning in at home, Viacom can also seek growth abroad—MTV is already in 85 countries and Nickelodeon in more than 100. "These are brands our company intends to nurture," says Redstone. That means spending more money, of course. Because in the TV business, staying young doesn't come cheap or easy.

By Ronald Grover in Los Angeles, with Richard Siklos in New York

VIACOM'S MIXED PICTURE

MTV and VH1 are picking up as Nickelodeon slips



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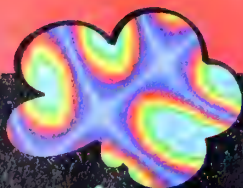
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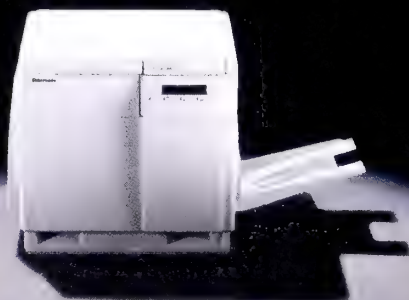


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THE CITI THAT SLEPT?

The new Citigroup inherits a tangle of money-laundering accusations

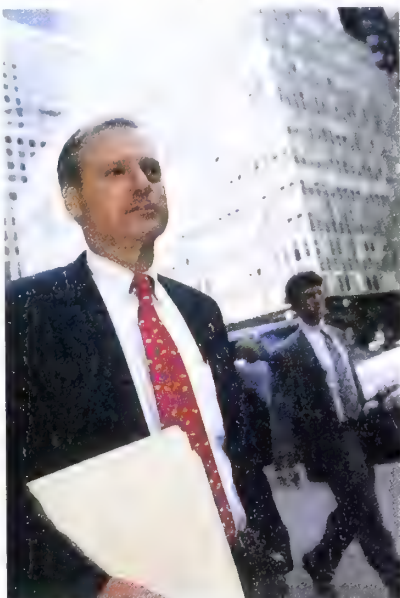
It was a major step in one of the most important and prominent money-laundering cases on record. On Oct. 20, the Swiss government in Bern announced it had compiled sufficient evidence to prove that some \$95 million in Swiss bank accounts belonging to Raúl Salinas de Gortari, the jailed brother of the former Mexican President, were protection payoffs from drug traffickers. The Swiss federal prosecutor proceeded to file legal papers to officially seize most of the funds, which had lain dormant since shortly after Salinas' 1995 arrest.

All of this had been expected. But it was still bad news to two very interested parties in the case: John S. Reed and Sanford I. Weill, the co-chairmen of Citigroup Inc., the product of an Oct. 8 merger of Citicorp and Travelers Group. After all, it was the private bank at Citibank, a unit of the former Citicorp, that had transferred most of the Salinas money to Switzerland. Now, more bad news is on the way. The General Accounting Office, the congressional watchdog, soon is expected to issue a hard-hitting report of Citibank's involvement in the Salinas affair. That report may lead to oversight hearings next

year into Citibank's operations.

Together, the Swiss moves and the GAO investigation are likely to revive a long-stalled Justice Dept. probe of Citibank. And if the evidence gathered by the dogged Swiss investigators holds up, even Citibank lawyers concede the likelihood increases that the bank could be indicted for money laundering. At Citicorp's 1997 annual meeting, Reed acknowledged that Citibank "would be subject to criminal indictment and conviction" if the government were able to prove Citi transferred illicit funds overseas. But Reed added he doesn't believe the government will be able to make such a case, and said that the bank has done nothing wrong.

As serious as Citi's legal problems seem to be, the worries about the venerable bank are more fundamental. The Salinas case is just one in a series of blunders by Citi, the third-largest commercial bank in the U.S. with \$331 billion in assets. A BUSINESS WEEK investigation shows that while the Salinas case was unfolding in 1995-96, Citi's top managers either could not or did not move swiftly enough to prevent similar episodes from occurring, and thus failed to protect the bank's most important asset—its brand name.



"CREATIVE DESTRUCTION"

Critics say CEO Reed's managing style leads to high exec turnover





CITI'S LITANY OF SLIP-UPS

► **RAUL SALINAS** Citibank private bankers transferred more than \$80 million for the brother of former Mexican President Carlos Salinas to Swiss accounts. Swiss prosecutors on Oct. 20 said \$95 million in Swiss accounts belonging to Raul came from drug trafficking, and moved to seize the funds. This could reinvigorate a stalled grand jury investigation of Citi for money laundering. Salinas says the funds are legitimate and denies wrongdoing.

► **BENAZIR BHUTTO AND ASIF ALI ZARDARI** Citi's private bankers opened Swiss bank accounts for former Pakistani Prime Minister and her husband, which the Pakistan government alleges were used to transfer some \$40 million in bribes and kickbacks out of country. While Bhutto and Zardari await trial on charges by Pakistan and Swiss officials, they claim the case is a political vendetta. Citi denies wrongdoing.

► **BANCA CONFIA** A week after Citicorp closed the deal to buy this small Mexican bank, it was indicted by the U.S. Justice Dept. for money laundering. While Citi was conducting due diligence, a U.S. Customs sting operation was carried out under its nose. Citi says it wasn't responsible for Confia's actions.

► **CARLOS GOMEZ** A former New York-based private bank employee, Gomez for six years carried out a multimillion-dollar fraud by forging signatures of Mexican clients. Gomez pleaded guilty in April.

DATA: BUSINESS WEEK, COURT DOCUMENTS

Indeed, just as the Salinas case was breaking, Citi private bankers allowed the spouse of another head of state to open a Swiss bank account, which, according to Swiss and Pakistani authorities, also was used to launder ill-gotten gains. Citi further failed to detect a six-year, multimillion-dollar fraud against it by one of its own private bankers. And earlier this year, Citi closed a deal to buy a troubled Mexican bank only to discover a week later that while it had been doing due diligence, the U.S. government was conducting a sting operation—and had laundered drug money through the Mexican bank's branches—right under Citi's nose.

HIGHLY DECENTRALIZED. Worries about the bank come at a critical moment in its history. The newly minted Citigroup, with total assets of \$751 billion, hopes to succeed as a global financial supermarket. But the sheer size and breadth of the new group gives regulators pause. It will be largely self-regulating, even more than other large financial institutions, because it offers more services and has more operations overseas. Federal overseers are left monitoring the risk-management systems Citigroup puts in place. The company thus is reliant more than ever on its internal culture and controls to prevent disasters. But Citi's recent history indicates that these systems may need rethinking.

Citi has always been highly aggressive in going after market share and is a recognized innovator. But the bank pits managers against one another in a process that Citi execs call "creative destruction." Managers who meet their goals are kept on, while those who don't are quickly pushed out. Regulators and former executives are concerned about the high turnover among senior management, which may leave the bank short of seasoned execs and perhaps adequate checks and balances. Prior to the merger, in fact, Reed had no heir apparent. The bank also is highly decentralized, making it difficult for marching orders to trickle down to the operating level, or to be enforced once they do. While these attributes alone didn't cause Citi's recent mishaps, regulators, law-enforcement officials, and former managers all agree that they played a role. Citi spokesman Richard J. Howe says management turnover and internal competition are not unusual for a bank of Citi's size, and that while Citi is decentralized, tighter risk management and other controls put in place by Reed have greatly improved the ability of senior managers to oversee operating units.

Despite the alliance with Travelers,

which has a risk-averse culture, Citi's culture is likely to prevail, especially overseas where Citi already is in 100 countries. Many of these countries are emerging markets without strong banking customs or an established rule of law to enforce standards of conduct. And while Citi has profited from its access to the ruling elite, that entrée also exposes it to the abuses of crony capitalism, or even outright corruption.

Reed admitted the inherent dangers of the bank's global strategy at an April, 1998, Securities & Exchange Commission conference. "Money laundering is a major problem for us because of the markets we operate in," said Reed. "We've been forced to institute some new procedures to protect ourselves." One such new procedure, put in place only last fall, requires all Citibank's private-bank branches to comply with a uniform policy to fight money laundering, including obtaining numerous details about the origins of a customer's funds. Previously, each Citibank region had its own compliance rule book.

"WINDOWS ON RISK." Despite the mishaps, Reed wins kudos for refocusing the bank away from corporate lending and toward global consumer banking. And he restored its profitability after the debacle of the 1980s and early 1990s, when Citi was brought to the brink of insolvency due to heavy losses in its real estate portfolio and by overlending to Latin America. Now Citi is riding high: In the first nine months of this year, net income is up 6% to \$2.7 billion on revenues of \$18.9 billion, up 9% from

"MR. TEN PERCENT"

Citibank sent millions offshore for Raúl Salinas, brother of the former Mexican President

the 1997 period.

Since its loan troubles, Reed also has sought to prevent more meltdowns by establishing the "Windows on Risk" committee, which consists of top managers who meet often to evaluate lending, underwriting, trading, and other risks around the world. The committee, for example, tries to spot—and correct—excessive lending to any single industry, country, or client. Reed also touted a new state-of-the-art anti-money-laundering program, which often was cited by regulators as the best in the industry. Now they wonder what went wrong. Says Ronald K. Noble, a New York University professor and former Treasury Under Secretary for Enforcement: "Before Salinas, I'd have said Citi had the right culture. But now, I just don't know."

One theory: Citi's strategy of expanding into new markets by courting political elites and wealthy business leaders means that the bank knows its customers too well and can't afford to alienate them



by rejecting their business. Not only would that delay ambitious revenue goals but it also might hurt Citi's reputation in the very echelons of society it's trying to attract. "Citi had the reputation for being both aggressive and clean," adds Noble. "But overnight, Citi went from being the standard-bearer of know-your-customer to the problem child of what could go wrong if you have the wrong customers."

This is apparent in the Salinas case—the one that most threatens Citi. Raúl Salinas has been in jail since February 1995, on charges of illicit enrichment and conspiracy to commit murder. In the highly publicized case, New York-based Citibank relationship manager Amy C. Elliott, who specializes in handling wealthy Mexicans' money, opened accounts for Salinas in New York, London, and Zurich in the spring of 1994. Previously he had been using false identities and passports to transfer money on his own to Swiss banks without alerting Mexican authorities. According to law-enforcement officials, Elliott instead used a web of concealed money flows, dubbed the "Confidas system," to move more than \$80 million offshore. Elliott is still at Citi and an employee with a good standing. Through her lawyer, she declined comment.

The system consisted of a trust, which

BUILDING A CASE

Swiss prosecutor del Ponte (center) and police chief Roschacher (right) seized Salinas' accounts



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PAKISTANI PARALLEL

Asif Zardari, husband of ousted Pakistan leader Benazir Bhutto, deposited \$40 million into a private Swiss account as the owner of Capricorn Trading

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was called Trocca Ltd., that held Salinas' funds. Trocca's directors were Cayman Islands shell corporations. Trocca itself was run by a Swiss trust company and a Citi subsidiary that was called Confidas. In a statement to Swiss police, Salinas said that if he'd known about the Confidas system earlier, he never would have resorted to using the false passports.

The bank appears to have violated several of its own internal rules. First, Elliott did not ask Salinas for two bank references, as Citi guidelines dictate. As a vice-president, Elliott had the authority to waive that requirement and substitute other references, but Citi won't say whether she did so with Salinas. Second, as the brother of Mexico's then-President, Raúl could have been turned down altogether because of what one former Citi exec says is another rule: that private bankers should be wary of accepting heads of state and their families as customers. A Citi spokesman says the bank does not forbid public officials from opening accounts, even though other Western banks increasingly are refusing to do so because of the risks involved.

KNOW YOUR CUSTOMER. Citibank may have further stumbled when it took Salinas on as a customer without knowing the source of his funds. Like all banks, Citi has strict know-your-customer rules that are meant to protect it from prose-

cution under federal money-laundering laws, which require banks to make sure their clients' funds are legal. A Citi spokesman declines to comment on whether Elliott ever asked Salinas for such verification. Says a former top Federal Reserve official: "If it wasn't money laundering, it was reckless disregard for the franchise name."

Soon, the money flow into the account became a torrent, reaching an astounding \$50 million in mid-1993. Raúl Salinas previously had been collecting only a \$192,000 government salary. Two government sources say Citi never filed a report to alert the Treasury Dept. to the large amounts of money Salinas was funneling overseas. Citi declined comment. A source with knowledge of Citibank's actions says that, even if the bank didn't know where Raúl Salinas' money came from, it had reasons not to question him: First, Carlos Salinas de Gortari, his brother, was then the highly respected President of Mexico; and second, it was plausible for the First Brother to have had access to a lot of money because he had married into wealthy families two times. Besides, the source argues, there simply was no reason to suspect Raúl Salinas then.

But even on that point, Citi's case may be weak. Law enforcement agents assigned to Mexico at the time say street talk about Raúl Salinas centered on his reputation as "Mr. Ten Percent," meaning that government deals awarding him a 10% cut often got priority. "The rumors



of corruption, kickbacks, and influence peddling all were being talked about back in 1992," says Jorge G. Castañeda, a well-known Mexican political scientist. "[Citi] should have asked questions, obviously about where the money they were moving was coming from."

With investigators bearing down on Salinas' alleged involvement with drug lords, Citi's legal situation could get precarious. Swiss Federal Prosecutor Carla del Ponte now claims she has amassed evidence that Salinas used his position as First Brother to protect Colombia drug cartels' shipments through Mexico to the U.S. "Raúl Salinas was making enormous sums of money from the Medellín and Cali cartels and shipping it to Switzerland," mostly via Citibank, says Valentin Roschacher, chief of the Swiss federal police unit handling the case. He says there is no indication that Carlos Salinas, Mexico's President from 1988-94, was involved.

If the Swiss evidence, which so far consists of statements from 78 mostly unnamed witnesses, holds up in court, and if the U.S. can show that Citibank turned a blind eye to warnings about Raúl Salinas, the bank could be subject to money-laundering charges in the U.S. Legal experts, however, caution that the Swiss are bringing a civil forfeiture action, not a criminal case, and so their standard of proof is lower than what a U.S. prosecutor would require. While the Swiss have moved to confiscate Raúl Salinas' funds, they simultaneously dropped their own case against him, and instead deferred any criminal prosecution to Mexican authorities. Meanwhile, Salinas' lawyers say that the case rests heavily on unreliable witnesses, such as convicted

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An IBM Company

ed drug smugglers, and insist that the money came not from drug traffickers but from wealthy friends who wanted Salinas to invest it.

Still, trouble with the Salinas accounts didn't deter Citibank from performing many of the same services for other public figures. Citi, for example, opened private bank accounts in Geneva for Asif Ali Zardari, husband of then-Prime Minister of Pakistan Benazir Bhutto, in 1995. The application was for a British Virgin Islands company called Capricorn Trading, but documents obtained by BUSINESS WEEK clearly show that Citibank understood Zardari to be the owner (see graphic, page 98). Zardari, for example, gave his address as Bilawal House in Karachi—the Pakistani equivalent to the White House or 10 Downing Street.

Within months, Zardari deposited some \$40 million into the accounts. The funds, the Pakistani government charges, are just a portion of some \$1 billion Zardari and Bhutto received in bribes and payoffs from government contractors. Both are awaiting trial now that criminal charges have been brought against them by Pakistani and Swiss officials. The couple claims the charges are part of a political vendetta by incumbent Prime Minister and Bhutto archenemy Nawaz Sharif.

The parallels between Zardari and Salinas are almost eerie. Zardari, too, is known as Mr. Ten Percent in his home country. He is currently in jail in Pakistan on charges of murder in connection with the 1996 death of Bhutto's estranged brother. Zardari already had spent two years in jail on corruption charges.

"COLD FEET." A Citibank source says the bank uncovered Zardari's alleged money laundering in mid-'96. And less than 18 months after opening his accounts, Citi private bankers closed them and began cooperating with investigators in Islamabad. But Bhutto allies suggest they acted only when the political winds shifted in Pakistan and it appeared Bhutto would be ousted. Citi spokesman Howe says "that allegation is nonsense."

Most observers doubt Citibank will get dragged into the legal case now that

two top Citi execs who are Pakistani natives are playing leading roles in advising the government. One is Shaukat Tarin, who is on leave as Citi's most senior officer in Pakistan while preparing the country's largest bank, Habib Bank Ltd., for privatization. Citibank, the largest foreign bank in Pakistan, is advising the government on the deal. The other, Shaukat Aziz, heads up the Citibank private bank and is rumored to be in line for Finance Minister. A Citi spokesman



DUE DILIGENCE?

Mexicans protest money laundering outside Banca Confia. Citi bought the bank one week before it was nailed in a U.S. sting

says Aziz has consistently turned down such offers in the past.

Despite the near miss in Pakistan and the scrutiny of the Salinas account, Citibank officials earlier this year found themselves enmeshed in another embarrassment—the pending acquisition of Banca Confia, a small, troubled Monterrey (Mexico) bank.

In 1996, the U.S. Customs Service began planning an elaborate sting operation to snare Mexican banks suspected of laundering drug money. Confia had been the subject of rumors about shady dealings involving offshore accounts and fraudulent investment schemes. Indeed, when first approached by undercover agents in 1997, bankers in one Confia branch were so eager to help disguise what they were told were Colombian drug proceeds that they suggested ways to improve Customs' money-laundering sham.

Within weeks, Confia began accepting money confiscated from drug dealers off the streets of Chicago and New York. In the eight months prior to February, 1998, Customs agents moved \$24 million in 22 separate transactions through Con-

fia accounts in New York, Mexico, and the Cayman Islands. For its labors, Confia received nearly \$1 million in commissions—and an indictment on May 18. Confia had announced its interest in Banca Confia the previous summer, and closed the deal on May 11, just one week before the indictment.

According to informed sources, Confia now claims that its auditors did uncover the money laundering, but were not followed by the Mexican government to investigate it. KPMG Peat Marwick, which was hired to examine Confia's books, declines comment. A Citibank spokesman also refuses to comment but points out that Citi was not responsible for Confia until after the sale.

Citibank didn't detect for six years unauthorized transactions of its own private banker, Carlos Gomez, who was employed in New York as an assistant to private banker Elliott. From 1990 until his resignation in 1997, Gomez obtained fraudulent loans by forging signatures of two bank clients and by using the names of fictitious clients. Altogether, Gomez pleaded guilty to defrauding Citi of \$18 million, which he used to finance a glamorous lifestyle. Citi also takes credit for eventually uncovering Gomez' deceptions, but it didn't do so until a routine audit was done once Gomez left the bank.

Citi spokesman Howe says that anytime the bank has a problem, "we draw lessons from it. We reemphasize the importance of know-your-customer and other compliance policies. We do this globally and routinely." Because of the Gomez case, for example, Citi requires more senior officers' signatures on loan documents and more face-to-face meetings with clients.

There is a broader lesson in all this. Most attention these days focuses on the financial stability of banks. Citibank's experience shows that the franchise of even the most profitable bank can be tarnished by a single questionable customer.

By Paula Dwyer and Steven Solomon in Washington, with Greg Smith in Mexico City and John Pany in Bern, Switzerland

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BY GENE G. MARCIAL

IS A PROWLER CASING PITTWAY?

Bottom-fishing, says value investor Scott Black, president of Delphi Management in Boston, is the way to go right now. So far, his catch has been handsome: He snapped up 150,000 shares of Tommy Hilfiger when it dropped to 34 in mid-October, down from 70 in late June; it has since risen to 40. And when Ross Stores, which hit 50 in July, fell to 24 in October, Black bought 225,000 shares. It's now 34. What's Black's latest find? Pittway (PRY), a maker of burglar- and fire-alarm equipment.

Now at 22, the stock hit 32 in June, and Black feels that, at worst, it's worth 31—about the company's estimated breakup value. "That's a very conservative estimate," according to Black, "of Pittway's assets"—which include 30% of Cylink, a supplier of network-information-security products, and 4.2% of U.S. Satellite Broadcasting, a provider of subscription TV programming. Mario Gabelli, who holds 13%

of Pittway, says: "It's a good growth company and a good cash generator—and it's very shareholder-oriented."

Black is definitely gung ho about Pittway's fundamentals, but he's also aware of the consolidation in the security industry. "I see it as a well-man-



BLACK: It's time to go bottom-fishing

aged, undervalued, asset-rich company," says Black. He notes, however, that Tyco International, a leader in alarm services, has been buying companies and might find Pittway attractive. "I wouldn't be surprised," he adds, if Tyco made a move. Last year, it bought ADT Holdings, a major provider of monitoring services in the U.S. and Britain.

Any deal, however, would have to be friendly: The Harris family, headed by Pittway Chairman Neison Harris and his son, President and CEO King Harris, owns some 40% of the stock.

Black figures that Pittway, which in

December spun off its Penton Publishing unit to shareholders, will earn a split-adjusted \$1.80 a share, fully diluted, next year, up from an estimated operating earnings of \$1.55 in 1998.

ALL SET FOR A HOT BLAST AT USX

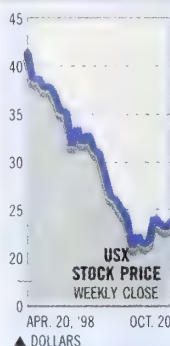
Investors must keep liquid to stay in the game," says Vince Carino, who until recently did just that. In late July, Carino, president of Greenhaven Capital in Palo Alto, Calif., switched to the defensive by upping his cash position from 5% to 50%. In early October, he started buying again, picking companies that he felt had been severely punished by the market. One of his top choices: USX-U.S. Steel Group (X), which has been in the doghouse all year.

From 42 in late April, the stock slumped to 20 in September, before inching up to 23 on Oct. 20. Carino says USX is due for a snapback. The catalyst, he says, is the dollar's recent weakness against the yen. USX's products, he says, will now have a chance to compete with the low-priced steel produced by the Japanese, because of the less expensive dollar.

"USX is among the stocks we're betting on to produce surprise earnings on the upside," says Carino. And when the fear factor dissipates and is replaced by greed, "the big investors looking for cheap, undervalued stocks will rediscover the cyclicals—among them USX," he argues.

Analysts have been cutting their earnings estimates on steelmakers, partly because the General Motors strike depressed demand and partly because of lower steel contract prices. Prudential Securities analyst Kenneth Hoffman was among those who cut estimates, but his rating on the stock remains a "strong buy," with a 12-month price target of 54. "We are in the beginning stages of a three-to-five-year global steel bull market," says Hoffman, and he thinks USX is one of the "vastly undervalued" steel stocks.

HAMMERED DOWN PRETTY HARD



DATA: BLOOMBERG FINANCIAL MARKETS

WIDER HORIZONS AT MASTECH

Like the shares of most other technology companies, Mastech (MAST) has been on a roller-coaster ride. After slumping from 30 in April to 16 in mid-October, Mastech is rising, hitting 20 on Oct. 20. Indeed, some think this information technology outfit is on its way to the mid-30s. What's the scoop?

For one thing, Mastech, which provides supplemental staffing and software services to 600 clients worldwide, just signed a contract with General Electric, according to CEO Sunil Wadhvani. "This GE contract could substantially add to our top and bottom lines," he adds. The company has been beating analysts' forecasts in the past five quarters and is expected to do so again in 1998 and 1999. On Oct. 29, Mastech will report third-quarter earnings, which will probably beat analysts' consensus estimate of 18¢ a share, says a New York money manager.

John Mahoney, an analyst at Raymond James & Associates in St. Petersburg, Fla., expects Mastech to earn 68¢ a share this year and 91¢ in 1999, up from 36¢ in 1997. Revenues will jump, he predicts, to \$472 million in 1999 from an estimated \$368 million in 1998, vs. 1997's \$240 million.

Analyst Thomas Neuhaus of Scott & Stringfellow Financial says the stock

is a "compelling value, with its strong potential revenue and earnings growth." He notes that Mastech's broad client list—in manufacturing, communications, and technology—will allow the company "to grow through any downturn in any one technology area." Mastech provides such services as client-server design, Year 2000 solutions, and Internet-Intranet programs. "Mastech has the infrastructure to become a \$1 billion company by 2002," he says.

LATELY, A ROUGH RIDE



DATA: BLOOMBERG FINANCIAL MARKETS

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BASEBALL

A GRAND-SLAM SEASON

On-field glory has burnished baseball's business prospects

This baseball season will forever be remembered for the September home-run heroics of Mark McGwire and Sammy Sosa, but it was apparent as early as May 17 that the gods were smiling on the game again. On that day, the New York Yankees' David Wells pitched the fifteenth perfect game in major-league history. Normally, the Yanks would have been lucky to draw 20,000 to a spring tilt against the Minnesota Twins. But because Wells staked his claim to immortality on Beanie Baby Day, a packed house of 49,820 cheered him on. The Yankees beat the Twins 4-0, and thousands of kids left Yankee Stadium with a stuffed animal and a memory to last a lifetime.

That was the season in a nutshell: extraordinary athletic performance enhanced, for a change, by spot-on marketing. But now that baseball has America's attention again and the 1998 World Series is drawing to a close, can the sport maintain its momentum? It is highly unlikely that the new single-season home-run record of 70 will fall next year, or that anyone will pitch another perfect game, or that any team will top the Yankees' new American League record of 114 wins. So the real issue is how does Major League Baseball (MLB) transform the excitement generated by this quasi-miraculous conflation of events into enduring enthusiasm for the national pastime.

Certainly, the business of baseball has already gotten plenty of bounce from this season. For starters, the on-field brilliance finally got fans to stop fixating on the players' strike that caused the 1994 World Series to be canceled. "The memory of 1994 will never go away, but we're as over it as we'll ever be," says Paul Beeston, MLB's president and chief operating officer. "People don't talk about it any more when they talk baseball."

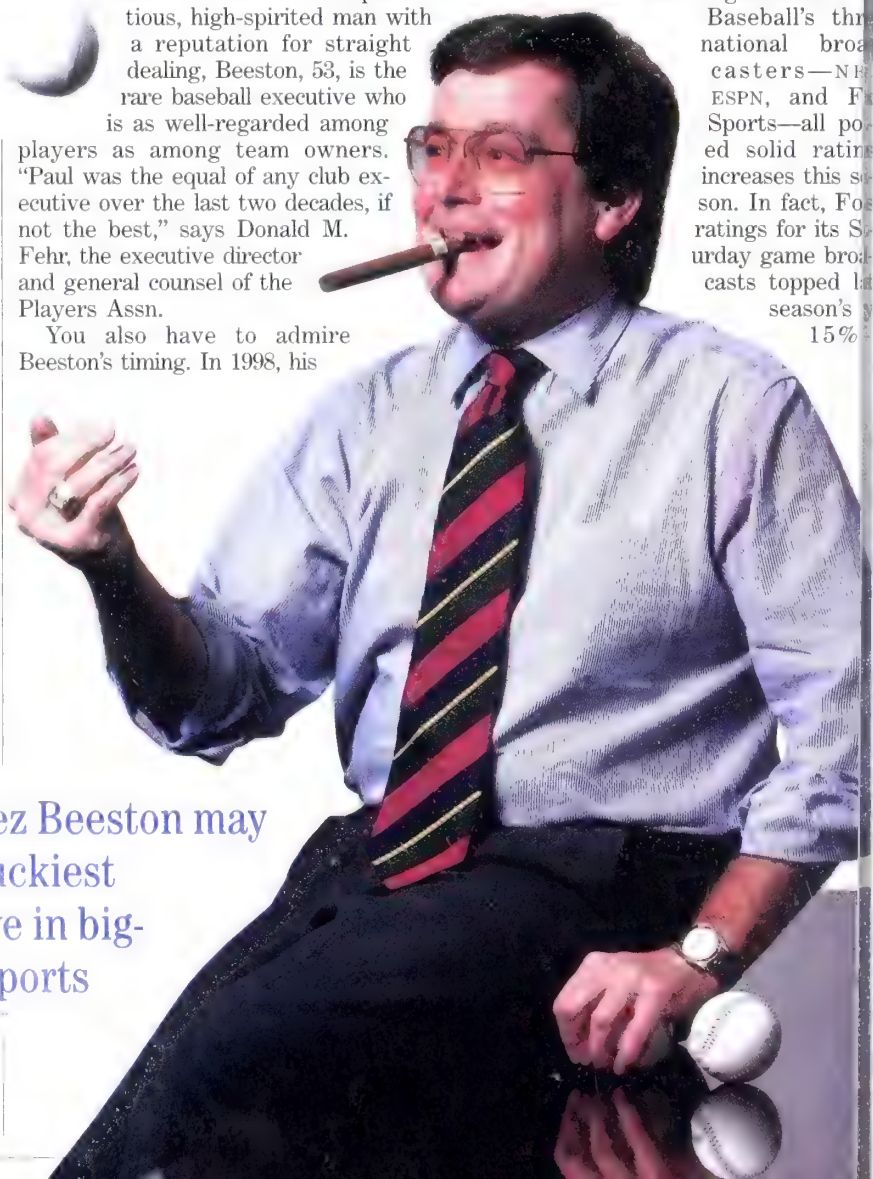
Beeston himself is an integral factor in the case for optimism. A longtime Toronto Blue Jays executive, Beeston was installed in the newly created position of MLB president in August, 1997. He filled a management void that had bedeviled the sport ever since Commissioner Francis "Fay" Vincent was ousted in 1992. An unpretentious, high-spirited man with a reputation for straight dealing, Beeston, 53, is the rare baseball executive who is as well-regarded among players as among team owners. "Paul was the equal of any club executive over the last two decades, if not the best," says Donald M. Fehr, the executive director and general counsel of the Players Assn.

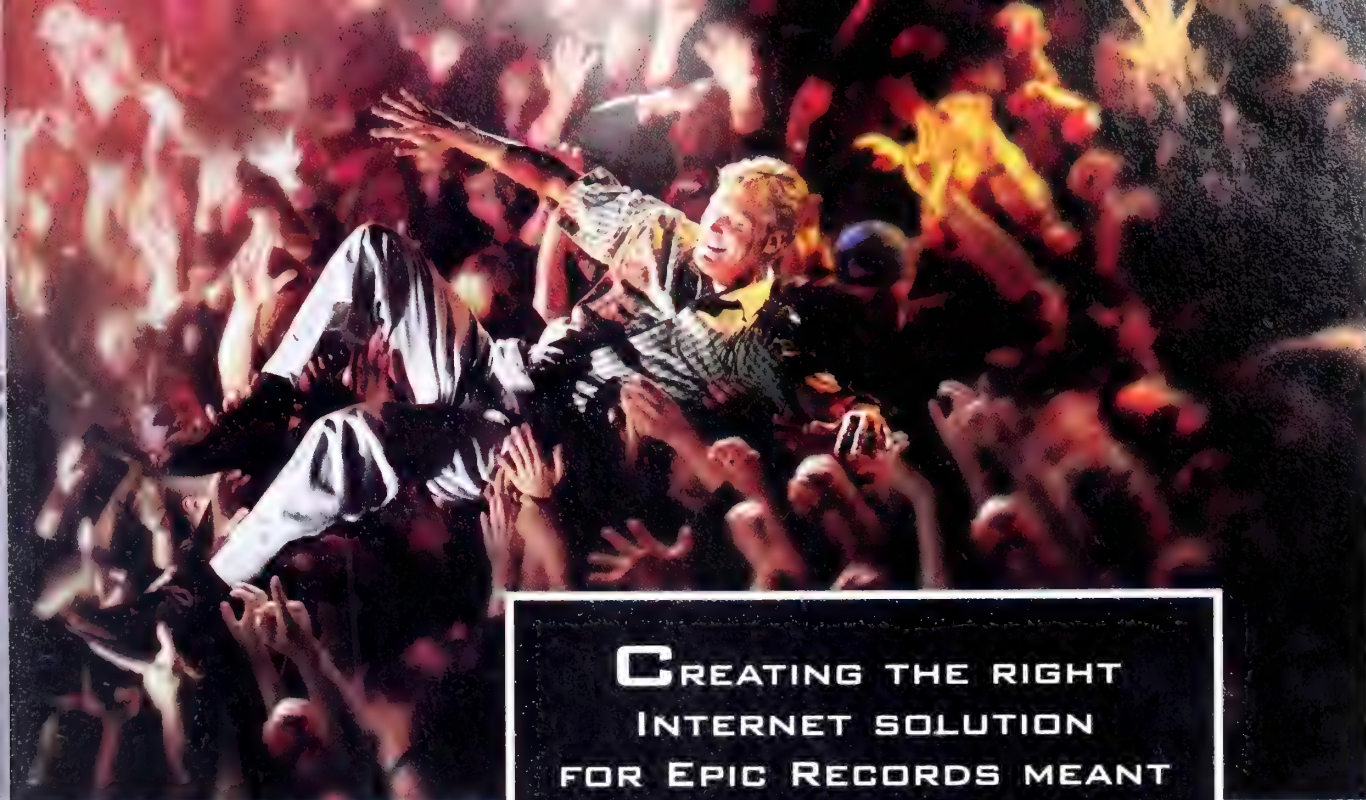
You also have to admire Beeston's timing. In 1998, his

first full season on the job, a record 70 million people attended a major league game. True, the gate was inflated by the addition of new franchises in Tampa and Phoenix. But Sosa's Chicago Cubs and McGwire's St. Louis Cardinals led the National League in road-game attendance—clear evidence that their home-run race sold tickets from coast to coast. **STAR POWER.** And there's no reason why attendance should decline much in 1999. Having been transformed from stars in household names, Sosa and McGwire will continue drawing fans no matter what their home-run totals. More important, over the next few years, new stadiums are expected to open in a half-dozen cities, including San Francisco, Detroit and Pittsburgh. The baseball market's revelation of the 1990s was that an adequately designed and well-located new stadium can enable even a mediocre team to draw huge crowds.

Baseball's three national broadcasters—NBC, ESPN, and Fox Sports—all posted solid ratings increases this season. In fact, Fox's ratings for its Saturday game broadcasts topped last season's by 15%.

MLB Prez Beeston may be the luckiest executive in big-league sports





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the largest jump in national game-of-the-week ratings since 1966. "I don't think there is any question that this has been a breakthrough year for baseball," says Ed Goren, executive producer of Fox Sports. In its eagerness to help boost ratings, MLB allowed Fox unprecedented input into the complex process of creating the 1998 season schedule. "Broadcasting has always been a priority," says MLB Vice-President Leslie Sullivan. "But only this season did it become our No. 1 scheduling priority."

EARLY INNINGS. The current network contracts extend through the 2000 season, denying MLB an immediate opportunity to cash in on baseball's surging popularity. But after years of desultory efforts to establish a foothold outside the sports-programming ghetto, Sullivan and her colleagues were able to parlay the home-run race into a regular gig on Nickelodeon. The kids' network assigned its own 10-year-old reporter to cover the home-run contest (sample question to McGwire: "How far can you spit?") and aired nightly updates that segued into World Series coverage after the season ended. "I think we are in the infant stage of what will be a great relationship," says Cyma Zarghami, ex-

ecutive vice-president and general manager of Nickelodeon.

MLB also used the race to best Roger Maris' record to open doors outside the U.S. For nearly a decade now, baseball's central office has been trying to build overseas markets by promoting foreign-born major leaguers to their home countries. The result has been an intense but narrow interest in American baseball in the 19 countries with players currently on big-league rosters. "The home-run contest enabled us to expose the game broadly in many countries for the first time this season," says Timothy J. Brosnan, chief executive of MLB International. In Japan, for example, TV carried every single Cardinals and Cubs game during the last two months of the season—while continuing to show all games pitched by Hideki Irabu of the Yankees, Hideo Nomo of the Mets, and other Japanese hurlers.

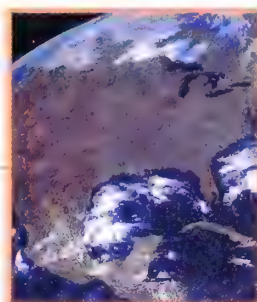
Dentsu Inc., MLB's main broadcast licensee in Japan, is betting that all that game coverage whetted the national appetite for American baseball. In mid-October, Dentsu signed a five-year contract extension with MLB under which the annual rights fee it pays will double, says Brosnan.



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At the same time, home-run hysteria induced more of baseball's U.S. corporate sponsors to work the game into their promotions at home and abroad. PepsiCo Inc. featured Sosa in all of its Latin American ads. In the U.S., sales of MLB-licensed apparel were strong all season but soared with the McGwire-Sosa contest and the resurgent popularity of the Yankees. "When you put

CROWD PLEASER:
Yankee Chuck Knoblauch shows his Series stuff

it all together, the only way the season could have been better is if McGwire played for the Yankees,"

says Robert Williams, president of Burns Sports Celebrity Service Inc., which pairs athletes and corporate sponsors.

MLB is planning to step up its marketing across the board in 1999 in what has become an increasingly close and productive partnership with the MLB Players Assn. The current era of good feeling between management and labor will not soon be imperiled by contract negotiations. The existing agreement runs through the 2000 season, with the union holding an option on 2001.

Until then, the direst threat to baseball's long-term health is the growing

gap between an elite minority of revenue-rich teams that can afford to pay for star players and their revenue-deficient doormats. "The disparity in payrolls between the highest and lowest teams is not just 100% or 150%. It's 500%, and that's untenable," says Paul J. Much, senior managing director of Houlihan, Lokey, Howard & Zukin, a Chicago investment bank. The correlation between winning and player salaries has come to seem inexorable, demoralizing the fans and players of also-ran teams.

In 1996, MLB imposed a revenue-sharing scheme that will be not be fully implemented until the 2000 season. "Revenue-sharing has worked to a certain degree, but not to the extent everyone thought it would," Beeston says, "mainly because the big-revenue clubs have grown faster than expected. We may have to go another step." But with team owners sharply divided on the question of how to restore competitive balance, Beeston is in no hurry to suggest what that step should be. Like the owners and players, he intends to bask for as long as he can in the glow of a truly memorable season.

By Anthony Bianco in New York

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The World's Best-Performing I

If you had to pick the world's hardest-charging technology company, which one would it be? For most of us, the initial choice would be Microsoft Corp. Bill Gates & Co. have honed aggressiveness into a near-art—with amazing results. The company has a stranglehold on desktop software. It has gained the upper hand in Internet browsers. It boasts \$17.2 billion in cash, the most of any U.S. company. And now it's shoehorning its software into everything from TV set-top boxes to burglar alarms.

But this year, take nothing for granted. The tech industry is undergoing sweeping change brought on by the Internet, the rise of wireless communications, the fast-approaching Millennium Bug, and the economic turmoil spreading around the globe. And while Microsoft remains a daunting powerhouse, all is

THE INFO TECH

not what it used to be.

We took a careful statistical look at performance in the high-tech industry and unearthed a batch of surprises. For one, mighty Microsoft is playing second fiddle to SAP, the German software maker of programs that automate all the big jobs in a company—finance, manufacturing, and inventory control. Intel Corp., the computer-chip maker on its way just a year ago to becoming the most profitable company in the world, has stumbled. Instead, Britain's Vodafone Group PLC and Finland's Nokia Corp. have rocketed to the top by riding demand for wireless communications. And tiny MindSpring Enterprises Inc. has elbowed its way into the circle of Internet elite.

These are some of the findings in BUSINESS WEEK's first annual Information Technology 100. The purpose of the ranking is to take a quantitative look at which companies are the top performers in what is fast becoming the world's most important industry. In the U.S., technology contributes roughly 30% of the growth in gross domestic



Information Technology Companies

THE TOP TEN

1

DELL

2

VODAFONE

3

SAP

4

NOKIA

5

INGRAM MICRO

6

AMERICA ONLINE

7

COMPUWARE

8

MICROSOFT

9

EMC

10

LEXMARK

product, adding over \$1.1 trillion to national output in the past three years. "Technological change is the ultimate driver of increases in standards of living," says Paul M. Romer, professor of economics at Stanford University's Graduate School of Business. "Without it, growth stops."

How did we come by our ranking? We started with high-tech companies culled from the database of Standard & Poor's Compustat and then added non-U.S. companies. We divided the tech companies into eight categories, including software, networking, and the Internet. Since revenue growth is the touchstone of technology, we eliminated the companies that didn't grow as fast as their industry.

Then, all the remaining companies were judged on four key criteria that were given equal weight. Again, revenue growth was used. Total revenues were factored in as recognition that absolute size is important. Shareholder return is included because it's the free

Cover Story

market's objective measure of how a company is performing. And we counted return on equity because—call us old-fashioned—we think profits matter. Hats off to Dell, Vodafone, and SAP. They top the inaugural Info Tech 100.

The ranking, however, is about more than bragging rights. It's also a weather vane that shows where information technology is headed. Look closely, and you can see the broad currents and secondary eddies washing through the technology field. Even where trends are obvious, such as the rise of the Internet, the Info Tech 100 spotlights the companies that are leading the way.

BIG IRON, TOO. Ultimately, the list forces a reexamination of what we think we know about technology. You've heard that nobody uses mainframe computers anymore? Tell that to No. 7-ranked Compuware Corp. or No. 17 BMC Software Inc., which are practically printing money by selling software tools for the industry's big iron. "People announced that the mainframe was dead five or six years ago—that's just not how it worked out," says Peter Karmanos Jr., CEO of Compuware. Karmanos is doing so well that he bought the National Hockey League's Carolina Hurricanes.

The Asia turmoil must be dragging

GRAPHICS BY DAVID RUDES BW

THE TOP TEN IN SIZE

GROWTH

COMPANY NAME	REVENUES (MILLIONS)
IBM	78,769.0
HEWLETT-PACKARD	46,624.0
LUCENT TECHNOLOGIES	29,042.0
BRITISH TELECOMMUNICATIONS	26,932.7
SBC COMMUNICATIONS	25,944.0
COMPAQ COMPUTER	25,316.0
INTEL	24,590.0
GTE	24,449.0
L. M. ERICSSON	22,189.6
BELLSOUTH	21,883.0

COMPANY NAME	REVENUE GROWTH
AT HOME	722.0
AMAZON.COM	443.8
VERIO	384.2
EXCITE	216.4
DOUBLECLICK	197.8
YAHOO!	196.0
INTERMEDIA COMMUNICATIONS	187.7
MICROMUSE	183.6
NEXTEL COMMUNICATIONS	177.5
RSL COMMUNICATIONS	117.8

down all the tech companies in the Far East, right? Wrong. Check out Taiwanese motherboard maker Asustek Computer Inc., which ranks 18th, thanks to an 85% surge in sales. Or 25th-placed Hon Hai Precision Co., a Taiwanese computer manufacturer with 65% revenue growth.

And then there's the Big Enchilada of techdom—the Internet. It's not just that more people are signing up with America Online Inc. and looking at Yahoo! Inc.'s Web site. The Net is ushering in profound change. Its vast, speedy reach is prompting companies to rethink every millimeter of their business—how to link up instantly with suppliers, contractors, manufacturers, and especially customers. To get the most out of the new Net economics, companies are automating internal functions right down into the bowels of their businesses. "The Internet really is the biggest change of the last 100 years in the technology world," says John W. Sidmore, vice-chairman of MCI WorldCom Inc., a major carrier of phone and Net traffic.

The ranking is chock-full of companies that have figured out how to build the networks for the new era. Top-ranked Dell Computer Corp., which almost tripled shareholders' money in the year ended Sept. 30, is the supplier of choice for corporate PCs, the gateways to the networked world (page 112). No. 11-ranked Cisco Systems Inc. provides the routers and switches to carry the digital lifeblood of companies across far-flung networks. And SAP and No. 34-ranked Oracle Corp. sell the enterprise and database software that tie it all together. When a salesman secures a big order, for example, manufacturing is automatically notified.

The top 100 also is a reminder of just how brutal tech competition can be. Former powerhouses like Motorola Inc., Apple Computer Inc., and AT&T Corp. didn't make the cut. Noticeably low on

the list is Compaq Computer Corp., the largest PC maker in the world, limping in at No. 97. The company suffered a loss of \$2.4 billion for the 12 months ended June 30, and shareholders took a 15% hit during the year ended Sept. 30. The reasons for the subpar performance? Compaq took a huge charge because of its acquisition of Digital Equipment Corp., and the surging popularity of sub-\$1,000 PCs crunched margins.

Count Intel as another victim of cheap PCs. The company is half of the "Wintel" juggernaut with Microsoft. Now, with sales growth slowing to a mere 2.5%, it ranks a mediocre No. 47 on the Info Tech 100. Still, Intel may not be down for long. Third-quarter profits—not counted in this ranking—outdistanced analysts' expectations.

Intel aside, less expensive PCs have benefited other technology companies by getting computers into the hands of more people. Some 46% of U.S. homes have PCs now, compared with 39% in 1996, according to International Data Corp.

Most rewarded are the players in the booming Internet field—AOL, Networld Solutions, and Amazon.com, to name just a few. Even companies providing access to the Web, a business written off just a year ago as hopelessly unprofitable, are flourishing—witness No. 35-ranked Minn Spring Enterprises (page 114).

MOBILE MANIA. Perhaps the only technology boom that can give the Net a run for its money is wireless communications. In developed countries, mobile phones are popping up on beaches, cars, on hiking trails—you get the picture. In parts of countries such as Brazil and China, they're being adopted as the only means of communication. That has driven the number of users worldwide to 213.7 million at the end of 1997, up from 144.2 million a year earlier, according to the International Telecommunication Union. The prime beneficiary is Vodafone Group, which provides wireless service in Britain and a dozen other countries (page 114).

There are even a few new twists in the basic phone business. Consider Century Telephone Enterprises Inc. The Monroe (La.) company has taken the road less traveled—marketing phone and high-tech services in rural and suburban markets. These are the regions that most experts say are being left behind in the Information Age. Shows how little they know. Century sells services such as Net access or call

I.D., to 18.6% of its customers. Such are the surprises in BUSINESS WEEK's ranking of tech superstars. Plunge on for more.

By Peter Elstrom in New York, with Catherine Yang in Washington and bureau reports

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SHAREHOLDER RETURN

AND PROFITS

COMPANY NAME	SHAREHOLDER RETURN AS OF 09/30/98
MINDSPRING ENTERPRISES	475.7
YAHOO!	416.7
EARTHLINK NETWORK	340.0
AMAZON.COM	328.8
AMERICA ONLINE	195.9
EXCITE	186.7
REALNETWORKS	177.5
DELL COMPUTER	171.5
INFOSEEK	168.0
ORANGE	161.5

COMPANY NAME	RETURN ON EQUITY
VANGUARD CELLULAR SYSTEMS	228.1
VODAFONE GROUP	148.2
DELL COMPUTER	73.9
HONG KONG TELECOMMUNICATIONS	46.1
CABLE & WIRELESS	41.6
LEXMARK INTERNATIONAL GROUP	40.5
ASUSTEK COMPUTER	40.0
AMERITECH	34.0
NOKIA	33.6
HON HAI PRECISION CO.	33.0

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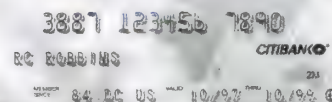
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BREAKING THE PLASTIC MOLD.

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WHAT DOES NO. 1 DO FOR AN ENCORE?

Dell Computer has ridden the direct sales of PCs into the stratosphere. Here's how it plans to stay there

Dell Computer Corp. defies gravity. Whether you measure its growth in sales, profits, market share, or stock price, the company is simply weightless. Last year, sales climbed from \$7.7 billion to \$12.3 billion. Profits rose from \$518 million to \$944 million. And then there's Dell stock, which has split six times in the past six years and continues to soar, up 120% this year, to \$53. To top it off, Dell is now the largest merchant on the Internet, selling \$6 million worth of gear daily. And all of this after three previous years of similar pyrotechnics. That's why Dell ranks

No. 1 on the BUSINESS WEEK Info Tech 100 list of top performers.

So what does the company do for an encore? Ask CEO Michael S. Dell, and he'll tell you with his typical straight face: more of the same. Well, sure, that's what you'd expect him to say. Except Dell—whose direct-manufacturing model shook up the industry by redefining customer service as the speedy delivery of custom-built PCs—now wants to get even more up close and personal with buyers. "Our industry has generally neglected the customer. I want to take the customer experience to a whole new level," Dell says.

That's not just marketing mumbo jumbo. For Dell, it's a new battle cry. The 33-year-old CEO sees customer service as the "next battleground for mar-

DELL: "The Net allows us to take personalization to the next level"

ket share." And nowhere will that be more true, say analysts, than in the consumer and home-office PC market, which Dell is just beginning to target. "The consumer and home-office markets are going to be where the growth is, and that's where I want us to go next to keep growing," Dell declares.

The message isn't lost on the troops at Dell's suburban Austin, Tex., headquarters. Pinned to a wall amid a sea of cluttered cubicles is a photograph of Dell. Someone has drawn a hat on his head, the kind worn by Uncle Sam. A slogan scrawled below reads: "Michael wants YOU to OWN your relationship with the customer." Just in case there's any doubt, Dell has tied bonuses and profit-sharing to service improvements of at least 15% this year. Success will be measured by shipping deadlines, fixing machines on the first try, and getting repair people to service customers within 24 hours.

Dell's new customer-service plan: Use the Internet to automate and customize service, in much the same way that Dell streamlined and customized PC production. The o-



the customer's-way mantra has cred-
it for Dell the tightest—and most
valued—relationship with buyers in the
business. By using communications
over speedy private networks and
the vast Internet, Dell plans not only to
provide personalized Web pages for
corporate customers but also to an-
swer knotty service questions with the
lightning speed that only the Net can
offer. "All our customers have indi-
vidual files with us online," says Scott
Cort, director of Dell Online. "Why
expand those files for a new kind of
direct-service model, one that will en-
able conversations with customers about
price, industry trends, and new prod-
ucts—or even, say, weather and news
today?"

Weather and news from your PC com-
pany? It couldn't hurt. Research results
from PC users show consumers are not
satisfied with the industry's track
record on service. In the November is-
sue of San Francisco-based *PC World*
magazine, a reader survey found that
Dell and Micron Electronics Inc. were
only two manufacturers (out of 17)
ranked "good" for "reasonably reli-
able systems and serviceable support."
None of the companies, though, earned
an "outstanding" rating on its work,
either, on notebook PCs.

Dell scored high mostly for having a
low rate of out-of-box quality prob-
lems. But its ranking was dragged down
by complaints of long waits on the
phone and a relatively high percentage
of unresolved problems. "Creating a new
direct-service model is extremely im-
portant," says Dell strategist Kevin
Rollins. "The first company to crack
this—or who can do quality and service
demonstrably better—will have a new,
sustainable advantage over everyone
else." Today, only a third of Dell's cus-
tomer-service force is dedicated to han-
dling queries online.

So far, Dell has been better than
its rivals at customer hand-holding,
on and off. Last fall, Dell delivered
its customized PowerEdge servers
to NASDAQ in New York in 36 hours so
the exchange could handle higher trad-
ing volume during the first whiffs of
Asian crisis. "We didn't have to
go extra," says John Delta, director of
NASDAQ's interactive services. "Orig-
inally, Dell got in with us on price, but
that's not the issue now. Their cus-
tomer support and service is what's
making our relationship."

That's what Dell wants to keep hear-
ing from a whole new crowd of less
savvy buyers—the small-business
owners and the work-at-home crowd.
The Net allows us to take personal-
ity to the next level," says Dell.
Starting this fall, the company will ex-

pand its online forums with Dell execu-
tives, called "Breakfast with Dell," be-
yond big corporate buyers to small busi-
nesses. The live chats will cover topics
ranging from the Year 2000 problem to
trends in the server market. Further
down the road, there will be a way for
customers to ask hundreds of service
questions, all of which, says Dell's senior
Web manager Manish Mehta, will be
answered automatically from Dell's on-
line knowledge bank with the help of ar-
tificial-intelligence software.

"CUDDLY TOUCHES." And coming in the
next few months: more warm and fuzzy
Web-service features, including "My
Dell" Web pages—customized pages for
small-business and home-office con-
sumers. Such additions will enable
these users to trade service tips, an-
swer queries, and get weather, business in-
formation, and technical support papers
over the Web. Also
in the works is the
"virtual account ex-
ecutive." Interested
in a notebook but
can't fly to Austin
for a demonstration?
"That's fine," says
Rollins. "Go to our
Web site, and get
a full-motion video
of someone explain-
ing it."

To Dell, the ben-
efits of dispensing
more service over the
Net are twofold: "It
can be a great relief
valve for disgruntled
customers," says
Mehta—and a relief
for shareholders, too.
Doug Chandler, a
customer-service an-
alyst at International
Data Corp., esti-
mates that phone
calls to give service
and support can cost
PC companies \$25
apiece. Dell's online
service operation, he
says, saves a bun-
dle—thousands of
calls per week and
potentially millions of
dollars. If that's ex-
tended to include a
greater percentage of
Dell's customers, it
could save millions
more.

Can Dell pull it
off? The direct-service
approach works well

with corporate buyers—the bulk of
Dell's business. Consumers and small
businesses, though, expect far more
hand-holding, and are more inclined to
hunt for bargains. They're also often
enamored of the marketing ploys and
gee-whiz gizmos that make corporate-ac-
count managers cringe. "For all its suc-
cess, Dell has had little experience with
these cuddly touches," says Kevin Knox,
senior analyst at Gartner Group.

And even if Dell persuades the mass-
es it's tip-top in customer service, there
are other challenges facing the company.
At a Sept. 25 meeting for analysts,
there were questions about price. While
Dell's machines are still cheaper than
comparable ones from Compaq and IBM,
Dell hasn't been lowering prices as fast.
"Normally, Dell had a \$100 to \$200 price

advantage because of
its direct model, but
that advantage is
nearly gone," says
James Poyner, a PC
analyst at CIBC
Oppenheimer. "Isn't
price supposed to be
Dell's advantage?"

Not necessarily.
Now that customer
service is the new
battleground, price
may not be the main
event. Says Dell:
"IBM and Compaq
are assuming that
price is the problem.
The problem is that
the dealer channel
they're using has
fundamentally failed
customers."

And what about
continuing efforts by
rivals to mimic Dell's
direct model? Copy-
cats such as Gateway
and Micron still don't
have the heft and
market clout of Dell.
As for rivals such as
Compaq who use
middlemen, Dell wins
on cost. "Anyone who
tries to go direct now
will find it very diffi-
cult—like trying to
jump over the Grand
Canyon," says Dell.
And now, with his ef-
forts to get even
more personal with
customers over the
Web, Dell's hoping
that gap just got a
lot wider.

*By Marcia Stepanek
in Round Rock, Tex.*



CELL-PHONE SENSATION

Vodafone's scrappy attitude makes it a wireless leader

When Chris Gent took over the top job at Vodafone Group PLC a year and a half ago, Britain's No. 1 cellular-phone company was on a roll. It was gaining share in Britain's fast-growing market and pushing into new ventures abroad. Gent, not one to shy from tinkering with success, overhauled the company's marketing. He fired the ad agency, launched a promotional campaign, and revamped distribution, putting 250 Vodafone stores on "High Streets"—the British term for main thoroughfares—throughout the country.

The result? Vodafone is on a growth and earnings tear. The \$4.1 billion company, which earned \$702.2 million last year, is on track to top that by 30% in 1998, according to analysts. And its stock, withstanding the tremors in world markets, has maintained its 50% gain so far this year. These numbers have made Vodafone the surprise top performer among non-U.S. companies in the BUSINESS WEEK Info Tech 100.

"LIKE ROCKETS." Raging cellular-phone growth worldwide is certainly a key to Vodafone's heady numbers. In Britain, where the company gets 60% of its revenues, the wireless market is growing by 30% a year. Outside its homeland, the company runs six cellular operations, from the Netherlands to South Africa, holds minority stakes in six oth-



GENT: The CEO isn't ruling out a U.S. acquisition

ers, and plans to offer service in Egypt in December. The international operations aren't terribly lucrative—they generate only 20% of the company's profits. But Gent sees long-term value abroad: "Some of these countries are going like rockets," says Gent.

And don't count out a British cell-phone invasion of the U.S. With its global success and a market cap topping \$35 billion, industry executives think Vodafone may try to gain a foothold in the world's largest cellular market. Gent doesn't dispel the notion. "We could acquire someone with a U.S. business," he says. AirTouch Communications is one of the possible targets, say analysts.

If Gent ever makes that move, Americans will get a

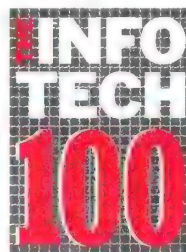
taste of the aggressive salesmanship that has put Vodafone on top in Britain. Although the company boasts a 35% British market share, Gent fights like a scrappy underdog. The CEO, who was trained as a marketer, tends to lead rivals such as British Telecommunications PLC's Cellnet in price cuts—he has dropped rates some 20% this year. That has helped him add 778,000 customers

this year, or 34% of the total.

Gent will need to keep innovating to meet the challenges ahead. Tiny telecom startups across Europe, including more than 100 in Germany alone, are proliferating. And in as little as two years, the cellular industry will begin a major technological shift to so-called Third Generation wireless systems that will offer high-speed data transmission. Says Kenneth Walters, managing director of Globus, a consultancy in Munich: "Right now it's Vodafone's turn to crow, but they have to keep looking over their shoulder."

Gent vows to do just that. To keep his place at the head of the pack, he's ready to tinker with Vodafone again.

By Stephen Baker, with Ivan Resch, in Paris



USER-FRIENDLY WINS THE RACE

Providing easy Net access pays big for MindSpring

When MindSpring Enterprises Inc. launched its Internet access service with eight modems and two computers four years ago, no one would have pegged it as most likely to succeed. After all, most of the services for getting onto the Net were notoriously difficult to use and far from profitable.

But MindSpring has beaten the odds. The company was created because these services were so tricky. In 1994, Charles Brewer, MindSpring's founder, spent three frustrating months trying to sign up and use the Net. That convinced him

of the need for a stress-free service. "Computers aren't perfect," says Brewer.

MindSpring's efforts at smoothing over the imperfections are paying off. It turned a \$498,000 profit in the fourth quarter last year and has become the fifth-largest ISP by signing up 455,000 customers. Its stock has zoomed 476% for the year ended Sept. 30, making it No. 1 in shareholder return on BUSINESS WEEK's Info Tech 100.

Credit the Atlanta-based company's laser focus on customers. Of its 700 employees, 60% are dedicated to taking care of customers' needs. Rather than emphasize the number of calls its support staff handles each week, the company sends surveys out to assess service quality. And those who call in for help wait less than five minutes, vs. six to eight minutes with some rivals. The result: Less than 3% of its subscribers ditch the service, well below the aver-

age industry rate of 7% to 10%, says analyst Jeff Sadler of Robinson-Humphrey Co. About 50% of MindSpring's new customers sign up based on word-of-mouth, keeping marketing costs down.

Still, as of Oct. 21, MindSpring's shares lost 18% of their value since the beginning of the month. Blame that on a general concern about tech stocks and on the company's Oct. 6 announcement that Chief Financial Officer Micle Misikoff is leaving. Misikoff says he wants a post with a startup—something MindSpring no longer is. "I'm leaving the company on solid footing," he says. So it's full customer service ahead.

By Heather Green in New York

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THE INFORMATION TECHNOLOGY 100

To compile the Information Technology 100, BUSINESS WEEK began with financial data from Standard & Poor's Compustat, a division of The McGraw-Hill Companies that has computerized information on 10,000 publicly traded corporations. We trimmed this universe to information technology companies and then added non-U.S. tech companies recommended by our network of foreign bureaus. To qualify, companies had to have revenues of at least \$300 million with one exception. Internet companies of all sizes were included because their impact is often

more significant than their revenues.

We divided this collection of about 400 companies into eight industry categories, such as software and networking. Companies that did not increase revenues as fast as their industry were eliminated from contention. The remaining group of companies was ranked on four criteria that were given equal weight: shareholder return, return on equity, revenue growth, and total revenues. Companies with sharp declines in current financial results were excluded as were companies where other developments raised questions about future performance. Finally,

the top 125 companies were reranked as a group.

REVENUES Latest available revenues for the 12-month period ended May 31, June 30, or July 31. For companies that do not report quarterly, the most recent annual data was used. Includes all sales and other operating revenues.

REVENUE GROWTH Percentage change in revenues compared to the previous 12-month period.

RETURN ON EQUITY Net income available for shareholders divided by common equity.

TOTAL RETURN The total return to shareholders including reinvested

dividends for the 12 months ended Sept. 30, 1998.

PROFITS Latest available profits for the 12-month period ending May 31, June 30, or July 31. Net income from continuing operations before extraordinary items.

Note: Data compiled by Standard & Poor's Compustat from sources such as statistical services, registration statements, and company reports that SPC believes to be reliable. Data are not guaranteed by SPC or BUSINESS WEEK as to correctness or completeness. This material is not an offer to buy or sell any security. Additional data: BUSINESS WEEK

COMPANY (STOCK SYMBOL)	SECTOR	COUNTRY	REVENUES		REVENUE GROWTH		RETURN ON EQUITY		SHAREHOLDER RETURN		PROFITS
			\$ MIL.	RANK		RANK		RANK		RANK	
1 DELL COMPUTER (DELL) Internet sales helped fuel the PC maker's phenomenal growth.	Comp	U.S.	15176.0	15	54.3	35	73.9	3	171.5	8	1182
2 VODAFONE GROUP (VOD) British cellular superstar has global ambitions—which could lead it to shop in the U.S.	TelS	Britain	4142.5	32	44.0	44	148.2	2	113.6	13	702
3 SAP (SAPHF) Its big-ticket software programs run everything from manufacturing to accounting—making it more strategic to customers than even Microsoft.	Soft	Germany	4131.1	33	64.9	29	30.0	16	65.5	35	516
4 NOKIA (NOK.A) This Finn is beating all comers in mobile phones.	TelE	Finland	11960.0	19	31.4	67	33.6	9	68.9	30	1560
5 INGRAM MICRO (IM) The secret backroom of the computer industry, this giant distributor sells everything from cables and computers to customer service.	Svcs	U.S.	19320.9	11	39.5	54	18.8	47	97.9	19	225
6 AMERICA ONLINE (AOL) The Big Kahuna of online services, this company has 12.5 million consumers hooked on interactivity.	INet	U.S.	2599.5	41	54.3	36	15.4	57	195.9	5	91
7 COMPUWARE (CPWR) This software industry veteran's products help companies build software applications and keep them humming.	Soft	U.S.	1253.5	59	43.2	45	28.1	20	94.6	21	224
8 MICROSOFT (MSFT) Office upgrades and Windows software keep the engine running hot. Only legal entanglements will slow down this train.	Soft	U.S.	14484.0	16	27.5	81	28.5	18	66.4	33	4490
9 EMC (EMC) As the amount of computer data stored by corporations grows, so does the leader in enterprise storage.	Comp	U.S.	3386.3	36	33.4	64	23.0	30	96.6	20	634
10 LEXMARK INTERNATIONAL GROUP (LXK) When IBM owned this printer business, who cared? After a venture-capital group bought the operation, Lexmark became a big brand in the business.	Comp	U.S.	2723.2	40	14.7	99	40.5	6	110.0	14	201
11 CISCO SYSTEMS (CSCO) The king of networking dominates nearly every corner of the business—some 85% of the Internet's routers come from Cisco.	Netw	U.S.	8458.8	24	31.3	68	19.0	46	90.4	23	1350
12 SBC COMMUNICATIONS (SBC) The Baby Bell has gobbled up Pacific Telesis and wants Ameritech next. Regulators may nix the deal.	TelS	U.S.	25977.0	5	8.0	113	30.2	15	48.0	42	3282
13 CENTURY TELEPHONE ENTERPRISES (CTL) Operating in 21 states, the phone company concentrates on selling high-tech services such as Internet access and Caller ID.	TelS	U.S.	1252.1	60	57.1	33	18.5	49	61.9	36	265
14 PEOPLESOFT (PSFT) Wall Street worries tanked its stock, but PeopleSoft is starting to look like SAP's main rival in enterprise software.	Soft	U.S.	1075.8	65	78.4	24	26.3	24	9.2	67	143
15 BELLSOUTH (BLS) Thanks to high-growth markets and expansion in Latin America, the Baby Bell has retained its independence. So far.	TelS	U.S.	21883.0	10	11.0	108	22.9	31	66.7	32	3633
16 AMERITECH (AIT)† A diverse Midwestern telecom company, this Baby Bell sells security systems and cable TV, not to mention phone service.	TelS	U.S.	16575.0	12	7.3	116	34.0	8	45.8	45	3423
17 BMC SOFTWARE (BMCS) BMC's mainframe software products may not be glitzy, but they sure generate profits.	Soft	U.S.	797.8	77	34.0	62	28.1	21	85.5	24	235
18 ASUSTEK COMPUTER Top engineering keeps this computer motherboard maker in the lead.	Semi	Taiwan	819.9	76	85.3	23	40.0	7	-1.1	79	270

KEY TO INDUSTRIES Comp = Computers and peripherals, INet = Internet companies, Netw = Networking, Semi = Semiconductors, Svcs = Service resellers and distributors, Soft = Software, TelE = Telecom equipment, TelS = Telecom services

FOOTNOTES †Has agreed to be acquired. ††Revenue, revenue growth and net income are annual data. ‡Total return is based on less than one year of data because IPO occurred since Sept. 30, 1997. *Sony is ranked only on its information-technology revenues of \$12.6 billion.

INFORMATION TECHNOLOGY 100

COMPANY (STOCK SYMBOL)	SECTOR	COUNTRY	REVENUES		REVENUE GROWTH		RETURN ON EQUITY		SHAREHOLDER RETURN		PROFITS
			\$ MIL.	RANK		RANK		RANK		RANK	
GTE (GTE) The local phone company with operations scattered throughout the U.S. wants to merge with Bell Atlantic. Regulators are concerned.	TelS	U.S.	24449.0	8	10.8	109	29.1	17	25.6	56	2273.0
CABLE & WIRELESS (CWP) A remnant of the British empire, C&W operates phone networks in Hong Kong and 50 other countries around the world.	TelS	Britain	11737.9	20	18.0	92	41.6	5	6.7	73	2159.5
TECH DATA (TECD) A leading distributor of more than 75,000 computer products and business services.	Svcs	U.S.	8532.3	23	55.9	34	12.7	67	8.8	69	108.2
IBM (IBM) Still your father's computer company, they do everything from tiny slivers of silicon to huge mainframe computers.	Comp	U.S.	78769.0	1	1.8	122	32.3	12	22.1	59	5940.0
SOLETRON (SLR) This contract manufacturer makes many products, from PCs to networking gear, for brand name companies.	Svcs	U.S.	5288.3	28	43.1	46	16.8	53	8.1	70	198.8
BRITISH TELECOMMUNICATIONS (BTY) After losing MCI to WorldCom, Britain's biggest phone company is now hitched to its former arch-rival—AT&T.	TelS	Britain	26648.1	4	5.6	119	14.0	60	107.4	15	2677.1
HON HAI PRECISION From connectors to bare-bones PC boxes, this manufacturer has a winning strategy for the build-to-order market.	Comp	Taiwan	891.7	71	63.5	31	33.0	10	-17.1	94	135.0
MCI WORLDCOM (WCOM) Second only to AT&T in long-distance, this newly merged company is ready to attack local exchange and international markets.	TelS	U.S.	8864.5	22	51.0	38	1.2	97	38.2	52	202.5
COMPAL ELECTRONICS Contract notebook PC maker has lured big orders from Dell and others with fast delivery times.	Comp	Taiwan	939.0	70	40.2	53	24.0	25	17.6	61	147.0
KEANE (KEA) Who you gonna call to fix that Year 2000 problem? Keane's phone keeps ringing.	Svcs	U.S.	835.3	75	50.4	39	22.5	32	13.4	64	66.6
HBO & CO. (HBOC)† The largest provider of healthcare-information systems—thanks in part to 17 acquisitions since 1993—and the prognosis is strong growth ahead.	Svcs	U.S.	1368.0	55	27.8	79	21.2	38	53.2	40	233.6
AIRTOUCH COMMUNICATIONS (ATI) Few believed a cellular company could succeed on its own, but CEO Sam Ginn has proved them wrong.	TelS	U.S.	4163.0	31	36.1	58	6.6	88	60.8	37	599.0
COMPEQ MANUFACTURING Printed circuit-board manufacturer leads the pack with superior technology.	Semi	Taiwan	335.4	104	61.9	32	32.0	13	12.6	65	88.0
GATEWAY (GTW) The direct marketer of PCs has a loyal following in the home market. Now its sights are set on small businesses—and Dell.	Comp	U.S.	6828.5	26	22.6	83	11.1	73	66.1	34	122.4
NETWORK SOLUTIONS (NSOL) It won a coup when the government extended for two more years its monopoly on doling out the .com, .org, and other domain names on the Internet.	INet	U.S.	63.6	114	106.7	16	12.8	65	91.4	22	7.5
ORACLE (ORCL) They survived a slowdown scare early this year. Look to a Web-ized version of the database to fuel future growth.	Soft	U.S.	7524.1	25	25.4	82	32.5	11	-20.1	99	1000.2
MINDSPRING ENTERPRISES (MSPG) Its 400,000 subscribers make MindSpring one of the top Internet service providers.	INet	U.S.	77.6	112	120.5	13	3.7	94	475.7	1	2.8
YAHOO! (YHOO) With more than 40 million users a month, it's the Internet's most popular source of news, stock quotes, weather, and E-mail.	INet	U.S.	114.7	109	196.0	7	-22.0	105	416.7	2	-16.3
AMAZON.COM (AMZN) This one wrote the book on selling music and books online.	INet	U.S.	307.3	105	443.8	2	-122.6	114	328.8	4	-48.3
ORANGE (ORNGY) The most recent entrant into Britain's mobile-phone market, this innovative operator has grabbed a juicy share.	TelS	Britain	1500.9	51	41.6	48	NM	122	161.5	10	-228.5
LUCENT TECHNOLOGIES (LU) After splitting from AT&T, the telecom-equipment maker has seen soaring demand.	TelE	U.S.	29042.0	3	14.6	100	0.3	99	70.7	29	-15.0
SUN MICROSYSTEMS (SUNW) The king of Unix and creator of Java, Sun will have to hold off Microsoft's assault on its computer workstation and server markets.	Comp	U.S.	9790.8	21	13.9	101	21.7	36	6.4	74	762.9
EARTHLINK NETWORK (ELNK) Watch out MCI WorldCom. Biggest standalone Internet service provider offers Net access and long-distance discounts, too.	INet	U.S.	111.5	110	95.9	20	-14.1	102	340.0	3	-32.2
STERLING SOFTWARE (SSW) Its software for helping companies do business with one another has made it a favorite on Wall Street.	Soft	U.S.	640.6	85	44.2	42	12.0	70	54.7	38	100.2
ANALYSTS INTERNATIONAL (ANLY) Computer systems and consulting firm rides the Year 2000 boom.	Svcs	U.S.	587.4	88	33.6	63	27.2	22	17.5	62	22.6
EXCITE (XCIT) Need a quick sports update or want to know who invented the French Dip? Surf over to Excite, which delivers a grab-bag of info on the Web.	INet	U.S.	89.1	111	216.4	5	-144.2	115	186.7	6	-100.6
TELLABS (TLAB) Telecom convergence reigns. So this maker of equipment connecting digital and analog networks is sitting pretty.	TelE	U.S.	1378.9	54	31.7	65	30.7	14	-22.7	104	329.1
J.D. EDWARDS (JDEC) This Denver-based maker of enterprise software is giving SAP a run for its money.	Soft	U.S.	843.5	74	44.1	43	11.3	72	43.3	49	59.6
INTEL (INTC) The world's largest chip company sets standards for the PC industry with its microprocessors.	Semi	U.S.	24590.0	7	2.5	121	26.5	23	-7.0	87	5762.0
HONG KONG TELECOMMUNICATIONS (HKT)†† Partly owned by Cable and Wireless, Hong Kong Telecom is a cash cow.	TelS	Hong Kong	4523.8	29	7.4	115	46.1	4	-9.5	90	2198.3

INFORMATION TECHNOLOGY 100

RANK	COMPANY (STOCK SYMBOL)	SECTOR	COUNTRY	REVENUES		REVENUE GROWTH		RETURN ON EQUITY		SHAREHOLDER RETURN		PROFITS
				\$ MIL.	PER SHARE	%	PER SHARE	%	PER SHARE	%	PER SHARE	
49	ALLTEL (AT) The local phone and wireless business has been very good to the Little Rock-based company.	TelS	U.S.	3443.8	35	7.1	118	22.0	35	39.3	51	552.7
50	INFOSEEK (SEEK) This portal's search, news, and information Web service seeks to catch America Online and Yahoo! with help from new partner Disney.	INet	U.S.	52.3	116	116.9	14	-16.9	103	168.0	9	-11.7
51	SYMBOL TECHNOLOGIES (SBL) Premier maker of scanners and handheld computers, its products are used everywhere—in retailing, transportation, and healthcare.	Comp	U.S.	860.7	73	20.5	87	16.6	55	75.3	28	81.1
52	QWEST COMMUNICATIONS (QWST) Boasts a state-of-the-art long-distance network and, after its acquisition of LCI International, it has customers to boot.	TelS	U.S.	966.1	68	116.2	15	-23.8	108	35.8	53	-858.2
53	NIDEC†† If you're in the market for spindle motors for hard-disk drives, you need Nidec with its 70% global market share.	Comp	Japan	876.2	72	27.7	80	10.7	76	102.9	17	48.0
54	VANGUARD CELLULAR SYSTEMS (VCELA)† This hot wireless-telecom operator has preliminary deal to be acquired by AT&T.	TelS	U.S.	410.2	101	22.5	84	228.1	1	20.6	60	36.7
55	CHINA TELECOM (HONG KONG) (CHL)††† A subsidiary of Beijing's telecom giant, this "red chip" controls mobile operators in several Chinese provinces—and a chunk of Hong Kong Telecom, too.	TelS	Hong Kong	1863.2	47	49.6	40	9.1	81	-1.6	81	596.1
56	SOFTBANK†† It's Japan's top software distributor, the owner of Ziff Davis, and an Internet investor with stakes in Yahoo! and E*Trade.	Svcs	Japan	3889.0	34	42.7	47	4.2	92	1.0	77	78.0
57	CADENCE DESIGN SYSTEMS (CDN) The Grand Poobah of the electronic-design software business.	Soft	U.S.	1079.9	64	35.2	61	19.9	43	-4.4	82	157.1
58	L.M. ERICSSON (ERICY) A new boss is starting to shake things up at this Swedish maker of mobile phones and infrastructure.	TelE	Sweden	22189.6	9	10.4	110	23.7	28	-22.6	103	1617.4
59	REALNETWORKS (RNWK)‡ The Microsoft marriage is over for this Internet video pioneer. But Intel and America Online want to be pals.	INet	U.S.	46.9	118	102.8	17	-37.6	112	177.5	7	-27.0
60	SPRINT (FON) As competitors merge, the perennial No. 3 long-distance carrier seems determined to go it alone.	TelS	U.S.	15506.0	14	8.2	112	9.1	82	45.7	46	836.6
61	ELECTRONIC ARTS (ERTS) Their studio system mimics Hollywood and keeps churning out the game software hits.	Soft	U.S.	963.4	69	36.1	59	13.5	63	13.6	63	77.7
62	MITEL (MLT) Canadian master of telecom-chip design and manufacturing.	TelE	Canada	704.1	84	35.3	60	20.1	42	9.0	68	61.4
63	HEWLETT-PACKARD (HWP) Silicon Valley's biggest and oldest company. It's struggling to maintain its amazing growth and profits record amid the turbulent world market.	Comp	U.S.	46624.0	2	13.0	103	19.9	44	-23.4	105	3041.0
64	QUALCOMM (QCOM) Develops and markets one of the most promising digital-wireless technologies.	TelE	U.S.	3023.3	37	70.0	27	8.7	83	-24.7	107	98.7
65	CINCINNATI BELL (CSN) The telecom player wins kudos for Internet access and high-speed voice-data.	TelS	U.S.	1969.5	44	16.0	96	23.7	27	-7.1	88	147.5
66	LEASING SOLUTIONS (LSN) Lessor of desktops, laptops, PCs and other equipment to big corporations.	Svcs	U.S.	259.5	107	41.4	50	18.0	51	44.6	48	15.3
67	AT HOME (ATHM) By teaming up with cable companies, the company provides high-speed Net access to consumers.	INet	U.S.	20.6	122	722.0	1	-298.1	118	107.0	16	-302.4
68	SUNGARD DATA SYSTEMS (SDS) Started by developing disaster-recovery services, now also treating software for financial services and healthcare.	Svcs	U.S.	1014.0	66	28.5	75	14.0	61	29.9	55	94.1
69	LYCOS (LCOS) A contender to be one of the leading Internet portals—and still independent.	INet	U.S.	56.1	115	151.7	12	-57.5	113	98.9	18	-96.1
70	PACIFIC GATEWAY EXCHANGE (PGEX) The international telecom carrier primarily provides wholesale services to other telecom companies.	TelS	U.S.	399.0	102	91.7	22	18.4	50	-5.4	84	16.1
71	RACAL ELECTRONICS (RCALY)†† This defense-electronics firm runs private phone networks for big companies and the British government.	TelE	Britain	1949.1	45	20.6	86	7.1	87	46.7	43	52.1
72	TELE DANMARK (TLD) The Scandinavian phone company has seen its stock soar.	TelS	Denmark	4322.5	30	7.3	117	5.4	90	85.5	25	224.1
73	NETCOM (NECSY) Sweden's No. 2 telecom provider is taking on dominant Telia with long-distance, cellular, and Net offerings.	TelS	Sweden	629.6	86	30.6	71	3.6	95	119.2	11	14.1
74	SINGAPORE TELECOMMUNICATIONS†† The longtime monopoly is facing new competition in the island republic.	TelS	Singapore	3000.0	38	11.1	106	21.0	39	-1.1	80	1100.1
75	TELEGLOBE (TGO) It's cashing in on deregulation to rush low-cost international long-distance services across North America, Europe, and Asia.	TelS	Canada	1494.2	52	19.4	90	9.3	79	46.6	44	99.1
76	NATIONAL COMPUTER SYSTEMS (NLCS) America's single-largest provider of education software and services to the K-12 crowd.	Svcs	U.S.	457.1	99	28.9	74	13.8	62	67.9	31	29.1
77	GIBER (CBR) Consulting firm cashes in on the Millenium Bug boom and expands its Year 2000 and enterprise business.	Svcs	U.S.	550.4	92	40.8	51	22.4	33	-14.4	91	33.1
78	FLEXTRONICS INTERNATIONAL (FLEXF) Fast-growing contract manufacturer has acquired its way to the upper rung of job-shops-for-hire.	Svcs	U.S.	1253.6	58	72.7	26	10.9	74	-25.6	109	25.1

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INFORMATION TECHNOLOGY 100

COMPANY (STOCK SYMBOL)	SECTOR	COUNTRY	REVENUES		REVENUE GROWTH		RETURN ON EQUITY		SHAREHOLDER RETURN		PROFIT
			\$ MIL	RANK		RANK		RANK		RANK	
79 STORAGE TECHNOLOGY (STK) Booming demand for computer storage and an alliance with IBM has lifted StorageTek.	Comp	U.S.	2216.2	43	7.5	114	20.9	40	6.0	75	233
80 AFFILIATED COMPUTER SERVICES (AFA) The firm manages computer systems for state and local governments.	Svcs	U.S.	1189.1	63	28.0	77	10.8	75	23.2	58	54
81 MICROMUSE (MUSE)‡ This San Francisco-based company's software helps customers such as America Online manage their networks.	INet	U.S.	22.3	120	183.6	9	-17.4	104	49.0	41	-5
82 L-3 COMMUNICATIONS HOLDINGS (LLL)‡ Need secure communications? This is where the military and major airlines go.	TelE	U.S.	795.5	78	19.9	88	7.7	86	80.4	26	21
83 BROADVISION (BVSN) Supplies software and services for Internet publishing and E-commerce.	INet	U.S.	37.3	119	101.4	19	-3.6	101	53.6	39	-2
84 AMERITRADE HOLDING (AMTD) By spending heavily on marketing, the online brokerage is growing fast.	INet	U.S.	138.3	108	75.0	25	0.4	98	45.5	47	0
85 DOUBLECLICK (DCLK)‡ The service brings together advertisers and Web site operators by placing ads on 930 Web sites.	INet	U.S.	49.4	117	197.8	6	-23.7	107	40.4	50	N
86 RSL COMMUNICATIONS (RSLCF) Poised to capitalize on the globe's newly deregulated markets, this telecom upstart offers long-distance service in 20 countries.	TelS	Bermuda	489.6	94	167.8	11	-433.1	119	23.3	57	-136
87 MAXIM INTEGRATED PRODUCTS (MXIM) A leader in chips that translate sound, light, pressure, and temperature into digital form.	Semi	U.S.	560.2	90	29.2	72	28.2	19	-22.0	101	178
88 CTS (CTS) Elkhart (Ind.)-components maker riding high on the growth of automotive electronics.	Semi	U.S.	467.0	98	31.2	70	23.1	29	-6.3	86	25
89 MISYS The beneficiary of the Millenium bug is now pushing into the market for healthcare software.	Soft	Britain	759.0	79	37.5	56	NM	122	75.6	27	87
90 EXCEL COMMUNICATIONS (ECI)† A telecom stud from the Lone Star state. Provides long-distance and paging services.	TelS	U.S.	1776.6	48	28.1	76	9.5	78	-5.7	85	75
91 PANAMSAT (SPOT) This commercial-satellite service shook the world when one of its birds went on the blink this year.	TelS	U.S.	752.3	80	52.9	37	5.4	91	-4.8	83	142
92 WANG LABORATORIES (WANG) Up from the ashes, Wang's coming on strong in IT services.	Svcs	U.S.	1887.0	46	48.8	41	-170.7	116	-8.0	89	-281
93 LORAL SPACE & COMMUNICATIONS (LOR) The former defense contractor wants to use its satellite expertise to provide high-tech voice and data services.	TelE	U.S.	1224.6	62	92.8	21	-3.2	100	-28.5	112	-23
94 POLICY MANAGEMENT SYSTEMS (PMS) Applications software and support firm for insurance companies cashes in on the automation wave.	Soft	U.S.	596.3	87	18.5	91	13.2	64	30.3	54	56
95 VERIO (VRIO)‡ The company has scooped up 40 Internet service providers to build a service catering to small- and medium-size businesses.	INet	U.S.	72.8	113	384.2	3	-29.1	110	7.6	71	-7
96 COMPAQ COMPUTER (CPQ) The world's largest personal-computer maker took a hit this year because of its Digital Equipment acquisition.	Comp	U.S.	25316.0	6	16.7	95	-23.5	106	-15.2	92	-243
97 SONY (SNE)††* Forget Walkmans. Sony is betting its future on entertainment PCs and digital TV.	Comp	Japan	51178.0	18	13.7	102	12.2	69	-25.6	110	168
98 ROHM†† For specialized chips in Japan, all roads lead to Rohm.	Semi	Japan	2545.0	42	12.8	104	15.2	58	-18.6	96	46
99 NEXTEL COMMUNICATIONS (NXTL) The wireless-service provider is growing rapidly by targeting businesses and expanding overseas.	TelS	U.S.	1230.8	61	177.5	10	-250.7	117	-30.1	113	-183
100 INTERMEDIA COMMUNICATIONS (ICIX) The telecom newcomer is equally adept at providing voice and data services.	TelS	U.S.	480.8	96	187.7	8	NM	122	4.7	76	-44

ALPHABETICAL INDEX OF COMPANIES

The number that follows each company name indicates its ranking in the table

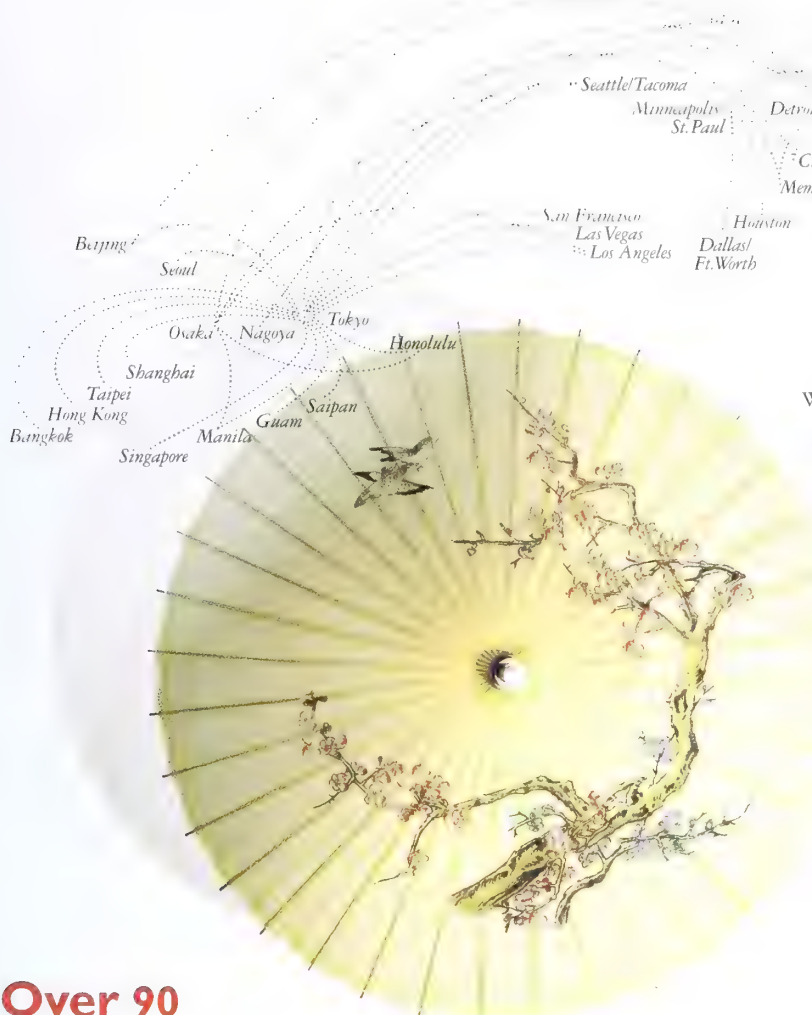
Affiliated Computer Svcs 80
Arlent Communications 30
Alltel 49
Amazon.com 37
America Online 6
America Online 16
Ameritrade Holding 84
Analysts International 43
Asustek Computer 18
Bellsouth 67
Bellsouth 15
BMC Software 17
Broadvision 83
Cable & Wireless 20
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Cisco Systems 11
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HBO & Co. 29
Hewlett-Packard 63

Hon Hai Precision Industry 25
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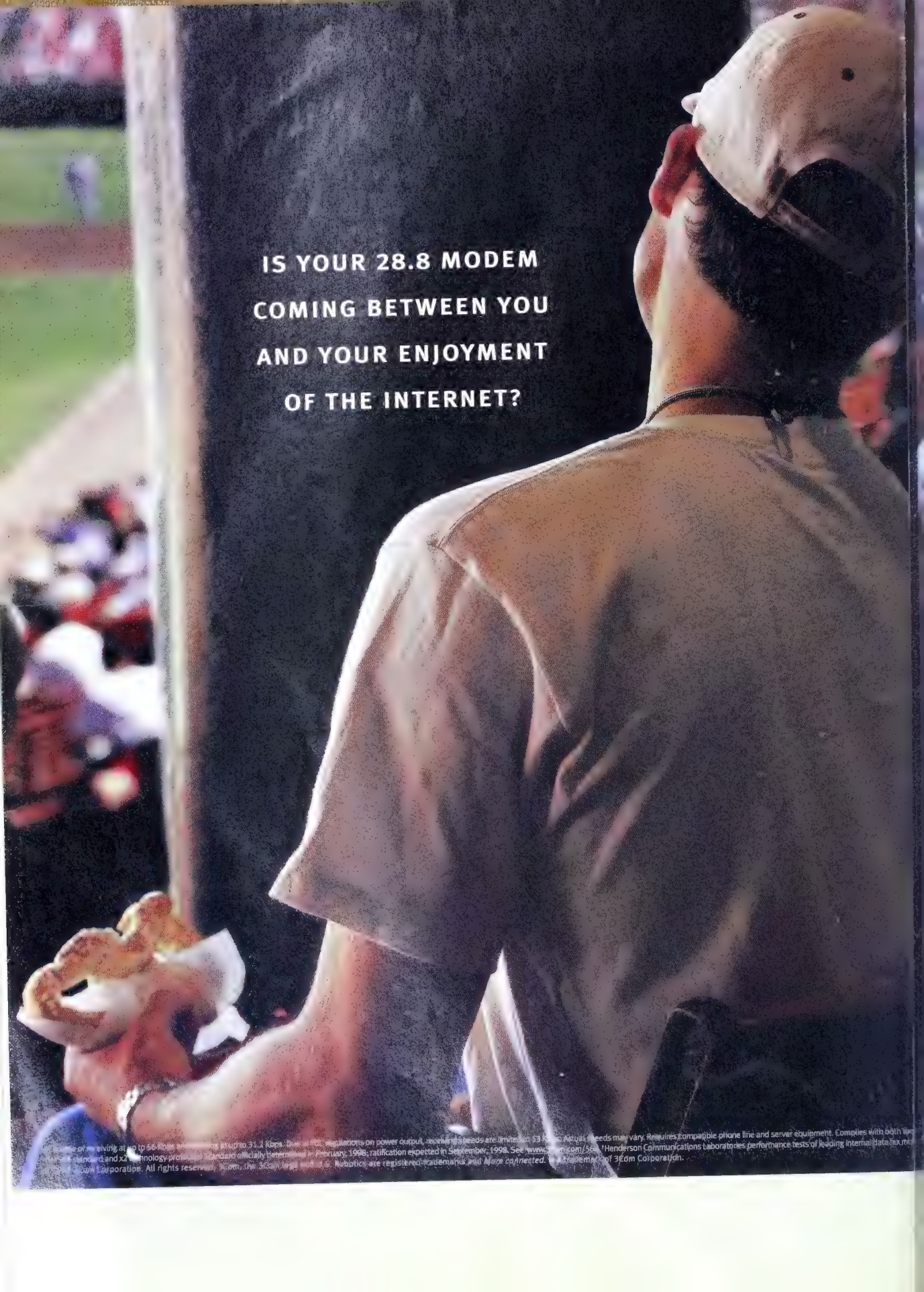
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BETTER CONDITIONS? A clothing manufacturer in Jakarta

WORK STANDARDS

A FLOOR UNDER FOREIGN FACTORIES?

But company plans to self-regulate are still rough

The global economic crisis has turned up the heat on companies that use cheap overseas labor. Nike Inc. announced in mid-October that it would lift wages for its entry-level factory workers in Indonesia by 22% to offset that country's devalued currency. Other companies have been thrashing out ways to address such problems without being undercut by rivals.

Now, nearly a year behind schedule, a long-divided Presidential task force on sweatshops is finally poised to agree on a factory monitoring system. The task force was spurred into action by a rival

effort by the American Apparel Manufacturers Assn. (AAMA). Both programs set guidelines for companies to police their factories and suppliers.

Neither plan addresses the central issue of what wage levels should be in poor countries. And participants say only the code that can attract the most companies will survive. So the AAMA's less stringent version may prevail if the task force falters at the last moment.

Still, the efforts, plus another launched earlier this year by the Council on Economic Priorities, a New York public-interest group, represent a potentially major step toward global la-

bor standards. The International Labor Organization had workplace standards on its books for decades. But they have done little, since governments don't enforce them. The new efforts, by contrast, are attempts by companies to self-regulate in the face of negative publicity about sweatshops. If they succeed, a floor of basic working conditions could begin to evolve around the globe.

The new programs are off to a shaky start, however. Back in 1996, the Presidential task force—with 18 garment makers and labor and human-rights groups—set out a new code of conduct for factories that would set minimum working hours and

health and safety conditions. Ever since, the group has been battling over a monitoring system to ensure compliance.

NO GUARANTEE. This summer, the task force deadlocked over minimum wage levels and unionization rights, but a rump of four human-rights groups—Nike, Liz Claiborne, Phillips Van Heusen, and Reebok continued to meet. The group, with White House prodding, held an 11-hour meeting on Oct. 19 and planned to wrap up a final agreement in principle on Oct. 23.

The plan is to establish the Fair Labor Assn. (FLA), a private entity to be controlled 50-50 by corporate and human-rights or labor representatives. The FLA would accredit auditors, such as accounting firms, to certify companies complying with the code of conduct. The FLA would inspect about a fifth of a company's factories for certification, and perhaps 5% a year after it's certified. Audits would be confidential, though auditors must work with local human-rights or labor groups.

Critics, though, say the plan will achieve little unless it addresses wages and unionization rights. The 1996 code requires companies to pay the local minimum wage or the prevailing industry

RIVAL IDEAS ON FACTORY MONITORING

Three groups have issued workplace guidelines for overseas plants

WHITE HOUSE In a project brokered by Clinton Administration officials, Nike, Liz Claiborne, and other companies plus some human-rights groups plan to set up an independent association to monitor a sample of a company's global factories.

APPAREL MAKERS Their trade group, with members such as Jockey, Sara Lee, and VF, has devised a less stringent code and will monitor factories one by one, instead of companywide. They hope to get human-rights groups on board.

COUNCIL ON ECONOMIC PRIORITIES Set up early this year with Avon, Toys 'R Us, and the New York-based council, this system also monitors individual factories. Code calls for paying a "living wage"—yet to be defined.



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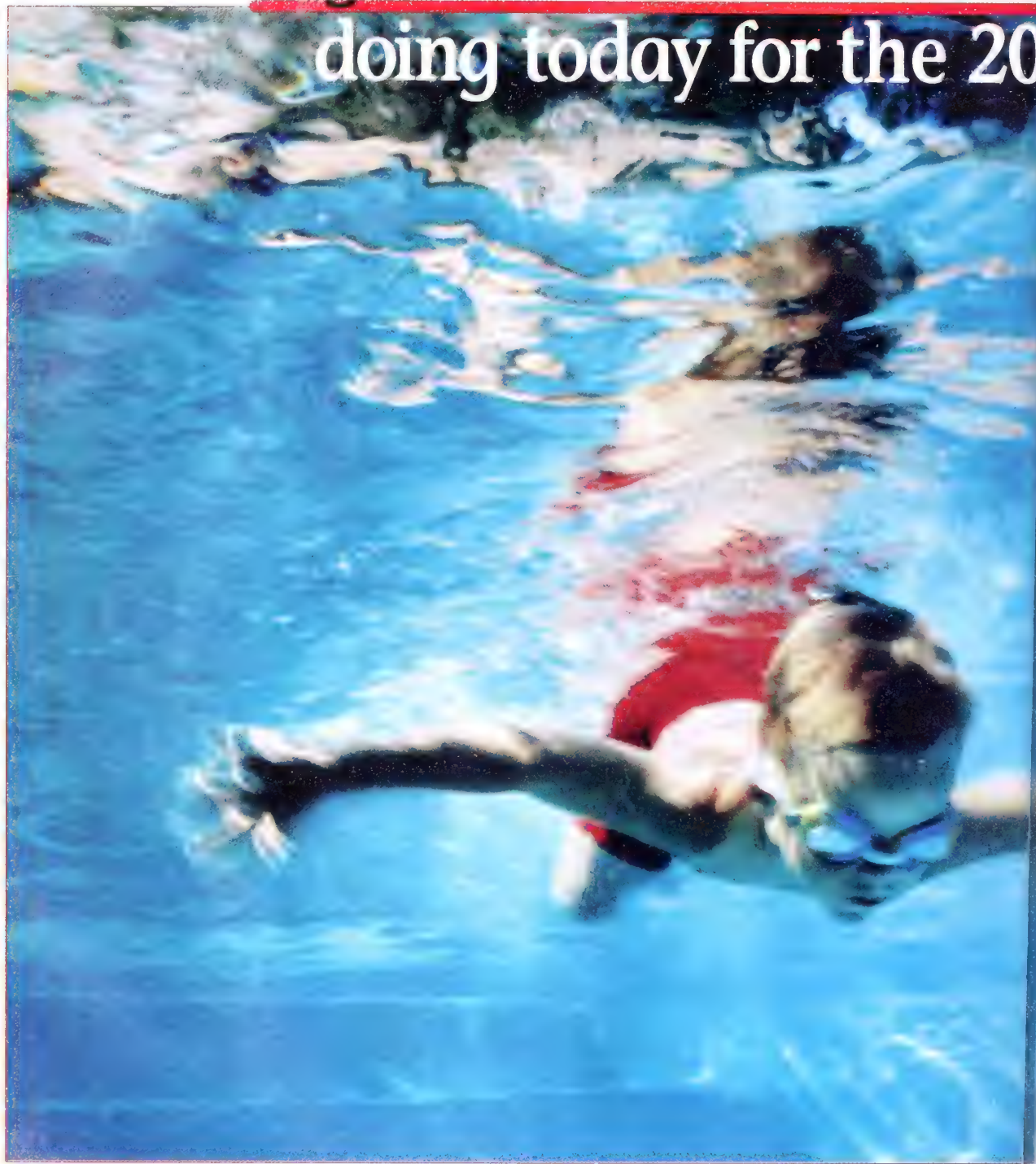
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What's Ingersoll-Rand doing today for the 20



Bobcat loaders are versatile
enough to handle digging
even small backyards

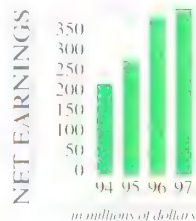
ympics?



Ingersoll-Rand is helping to create pools where today's toddlers can learn to become tomorrow's Olympic winners. Our Bobcat® skid-steer loader's versatility makes it a top performer on any construction project.

The Bobcat loader is just one example of the new Ingersoll-Rand. You will find us a different company today—highly diversified and increasingly global. Acquisitions of leading world brands such as Thermo King® and Club Car® have redefined the company.

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Such changes led to record earnings in 1997, the fourth year in a row. And the trend continues.

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see page 142

The Workplace

wage and to recognize employee rights to form unions. But the Union of Needletrades, Industrial & Textile Employees and a human-rights group want a statement of apparel workers' basic needs, on the assumption that many earn less than a "living wage." The FLA, they say, should apply the results to the code. Dissidents also want companies in countries such as China to pull out if unionization efforts are thwarted, as currently occurs. The task force refused, though members of the FLA still can examine wages absent a formal requirement to do so.

BIGGER TARGETS. Corporate task force members fear that few other companies would sign on to the dissidents' monitoring plan. As proof, they point to the AAMA, whose members, including Sara Lee, Jockey International, VF, make 85% of the \$100 billion in wholesale clothes sold in the U.S. annually. That group has approved a similar code of conduct, only less strict, which requires companies to pay only the existing minimum wage, not the prevailing industry one, which often is higher.

What's more, the AAMA effort began in part to avoid involvement with union members of the White House group, says AAMA President Larry Martin. The AAMA plans to set up an independent association and intend to approach human-rights groups and universities about joining. It also has worked with Elliot Schrage, a Columbia University business professor who is active in antisweatshop activities. But no doubt if we'll have unions involved, we're management folks," says Martin.

The two efforts pose a dilemma for companies that want to deal with sweatshops. Human-rights groups are pushing to continue efforts to expose bad factories. Companies that sign on to the plan could allay some criticism. But they also may become bigger targets if the factories don't pass muster or are criticized but critics find violations anyway. These "strict standards create risk for any company that joins, but we think the risk is even greater for those who [don't] address these problems," says Roberta S. Karp, Liz Claiborne's general counsel and task force co-chair.

Both groups hope to win over companies to their antisweatshop code already. Wal-Mart Stores Inc., which has been accused of selling clothes made in sweatshops, has expressed interest in the AAMA plan, a spokesperson says. Indeed, as the Asian crises batter developing countries, sweatshop abuse is likely to grow—and companies will want more than ever to curb them.

By Aaron Bernstein in Washington

Your PDA lives in a hostile environment

The briefcase jungle of laptops, keys, and cell phones can be hazardous to the health of your hand-held computer. Give it the best care possible. Protect it with the new PDA Survival Kit, containing four essentials to make it last longer and work better.

The PDA Survival Kit has all the accessories you need to help make the most of your powerful little computer:

Brain Wash two-step cleaning system restores luster to your screen.

WriteRight clear textured screen overlay prevents scratches, improves handwriting recognition, and reduces glare.

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INCA
ComputerWare
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DataVision
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**"SO MY SALESPEOPLE CAN GET E-MAIL ON THE MOON.
HOW DOES THAT MAKE ME MORE PROFITABLE HERE ON EARTH?"**



It's true; with wireless technology today you can do all sorts of fancy tricks. You can access the web from the top of a mountain or send a fax from a moving taxi halfway across the Golden Gate Bridge. But that raises an important question: *So what?* Luckily, there's a simple answer:

INCREASED PRODUCTIVITY

When you can send a fax directly to your salesman in his rental car instead of to the hotel he'll be at that night, it's not just a stunt; it's more productive. When you can reach one of your people in an airport 2,000 miles away while you're on a train home, it's not just more convenient; it's more efficient.

YOUR PEOPLE CAN DO MORE

At GTE Wireless, we can provide a wireless solution for your company that will let all your people do more now. With

advanced features like wireless internet access, paging, three-way calling and mobile fax capabilities, just to name a few. And GTE's business packages can link your employees together wherever they are, so they can talk to each other, and the main office, as often as they need to – at special reduced rates.

ONE SIZE DOESN'T FIT ALL

But most important, we won't try to shoehorn you into some pre-configured plan. We'll design a wireless system specifically to fit your company's needs – at a price that fits your company's budget. To let your people do more and be more productive. That's how we can help you be more profitable. And no, we can't really get e-mail to the moon. Yet. To find out about GTE Wireless, just call 1-800-587-2877.



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PEOPLE
MOVING
IDEAS

Students start business.
Business makes profit.
Students use profits to teach children
about the free market system.
(It's enough to give a capitalist goose bumps.)

The students were from Pittsburg State University, Pittsburg, Kansas. They didn't start one business, but successfully ran six businesses. And the profits they made funded 53 educational programs they developed and actively taught throughout their community.

The students were SIFE team members. SIFE (Students In Free Enterprise) sponsors student teams on more than 500 college campuses. SIFE provides students with what they can't get in a classroom — real life experience, working, living and breathing as entrepreneurs.

Judith Borck, President and CEO of Country Home Bakers, says: "SIFE has renewed my faith in young people. They accomplish so much in a short time and, more importantly, they make a real difference in their communities."

Len Roberts, President of Tandy

Corporation/RadioShack, says: "SIFE creates good salesmanship and teaches the students how to lead — something that is not taught anywhere."

Bob Martin, President and CEO of Wal-Mart International says: "SIFE provides one of the cornerstones for the future of free enterprise. When I look at these students, I see their excitement, entrepreneurial spirit in action — and it's inspiring."

Through SIFE, college students learn to lead by helping others succeed. But for SIFE to grow, your time and expertise as business leaders are needed. We urge you to call the number below and get involved as a SIFE competition judge, donor or guest speaker.

The experience is guaranteed to give you goose bumps.



"Helping people achieve their dreams through free enterprise education." Call 1-800-677-SIFE.

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You've chosen your employees for their talent and expertise.



Choose their health plan for the same reason.

When choosing the right health plan, it helps to know all the facts. That's why we'd like you to know that a board of experts, the California Cooperative Healthcare Reporting Initiative, recently reported that it gave Kaiser Permanente high marks on eight out of nine clinical measures, from cervical cancer and breast cancer screening to beta blocker treatments after heart attacks.

Setting the benchmark in California for quality care is nothing new to Kaiser Permanente. In fact, we're continually recognized for practicing great medicine.

So give your employees a health plan that works as hard as they do. After all, they are one of your company's most valuable assets.



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EDITED BY NEIL GROSS

BAR-CODE PATENTS GO BEFORE BAR, AGAIN

THE TIME INVENTOR ne H. Lemelson died in 1996, he and his foundation collected more than half a billion dollars in license fees for a bundle of patents covering bar-code readers and inspection gear used on automated production lines. Now, the Lemelson patents are due to raise cash—and legal battles (BW—July 20). On July 14, a company with its own vision technology filed a lawsuit to have Lemelson's patents declared invalid. The lawsuit, by Cognex Corp. of Natick, Mass., seems to have first blush. The Lemelson Foundation has never made royalties from Cognex, and it makes sophisticated vision-inspection systems.

But the foundation has fought pitched court battles to collect fees from some of Cognex' premier users, which include Ford Motor, Procter & Gamble, Kimberly-Clark, and Intel. "Since Lemelson died, we've been getting more and more complaints from our customers," growls Robert J. Shillman, president and founder of Cognex.

Shillman says his company's 150 engineers have put in more than 1,000 cumulative years perfecting their own vision technology—earning 30 patents of their own along the way. He wants his customers to be able to buy his products without having to fight



Lemelson's foundation over the right to use them.

Lemelson Foundation lawyer Louis J. Hoffman says Cognex' customers are infringing on its patents "by practicing the patented methods to manufacture products." The Massachusetts courts will have to make the call. □

DO YOU SAY TOMATO. MAY ANESTHESIA HAVE AN IMPLICATION

CHEMICALS THAT ACT AS natural insecticides in plants are turning into a headache for anesthesiologists. Potatoes, tomatoes, eggplants all produce compounds called SGAS, or solanaceous glycoalkaloids. These ward off bugs and are generally harmless to humans. But now, a University of Chicago study suggests even small amounts of these chemicals—ingested several days before an operation—can delay the speed at which patients break down common anesthetics. That can reduce patients' ability to quickly shake off drugs after surgery, thus delaying recovery. Dr. Jonathan Moss, professor of anesthesia and critical care at Chicago and lead author of the study, thinks SGAS and other chemicals in food may account for a lingering recovery. Patients of about the same age and body weight often respond differently to common anesthetics and muscle relaxants. SGAS could account for the variation, he says, because they inhibit two separate enzymes responsible for breaking down common anesthetics. The evidence? When minuscule amounts of SGAS were mixed with human enzymes in a test tube, they blocked the enzymes' ability to break down the drugs. Despite these findings, presented on Oct. 20 in Orlando, Fla., Moss warns against pre-surgery diets until the effects are better understood. "Careful anesthesiologists anticipate variability and monitor patients throughout an operation," he says. □



CAN BART SIMPSON HELP TRACK ENEMY AIRCRAFT?

MILITARY RADAR HAS ONE great drawback: Enemy missiles can "backtrack" the signals to their sources. The allies used so-called anti-radiation missiles supplied by the U.S. to destroy Iraq's air-defense radars during the Persian Gulf war. But U.S. forces are also vulnerable.

After 15 years of quiet development, Lockheed Martin Corp.'s Mission Systems unit has a safer alternative. Called Silent Sentry, it exploits the fact that the skies are already chock-full of commercial radio waves. Silent Sentry uses those waves as its "radar." Some of them inevitably bounce off jets, helicopters, and missiles plowing through the airwaves, and Silent Sentry can detect that. It's just as if the flying objects were being "illuminated" by radar signals at commercial frequencies. Tune in those reflections with a sensitive antenna, then use a computer to sort out the echoes from individual sources, and it's possible to keep tabs on planes or missiles without sending out a telltale radar signal. The system also can update its display faster than radar systems because there's no delay as a radar signal travels out and back.

Using a powerful Silicon Graphics Inc. computer, Silent Sentry can follow some 200 targets at distances of up to 140 miles. The \$5 million system works best by triangulating on targets using three different broadcast signals. But it can scrape by with one: From its Gaithersburg (Md.) headquarters, Lockheed Martin Mission Systems has no trouble plotting the traffic over Baltimore's airport using signals from a nearby FM radio station. *Otis Port*

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child's education



HISTORY OF POWERED FLIGHT PRESENTATION.JPG

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IT'S TIME TO REFINANCE...AGAIN

Less than a year after refinancing his Encino (Calif.) home, Larry Levine went shopping for a better deal. With mortgage rates at their lowest point since flower children and the original Volkswagen Beetles roamed the earth, the restaurateur

snapped up a 30-year, fixed-rate mortgage in September at 6.625%, shaving 1 percentage point from the interest rate on his \$300,000 loan. He rolled several thousand dollars of closing costs into his new mortgage, so he only had to spend a couple hundred upfront for an appraisal. His monthly savings? More than \$200.

As mortgage rates decline—reaching a 30-year low of 6.49% in early October before edging back up within a week to around 7%—they are triggering the decade's second

major refinancing wave. Running at about twice their normal pace, refinancings are expected to account for about half of this year's \$1.4 trillion market for mortgages, says the Mortgage Bankers Assn.

SEESAW. Should you join Levine and the crowd of other Americans now refinancing? With financial market volatility high and mortgage rates seesawing off record lows, it's tempting to try to snag the cheapest deal possible. Indeed, the Federal Re-

serve's surprise interest rate cut on Oct. 15 has already sent 30-year mortgage rates back down slightly. Even with their current volatility, however, mortgage rates remain cheap—and their short-term swings hard to predict.

"I would lock in and not gamble," advises David Lereah, the MBA's chief economist. Adds Keith Gumbinger, vice-president at HSH Associates in Butler, N.J.: "Anyone with a mortgage rate above 8% should at least be running the numbers."

The windfall for U.S. homeowners comes courtesy of financial turmoil in Tokyo, Moscow, and São Paulo that has sent investors scurrying for the safety of U.S. Treasury bonds. Interest rates, which dip as bond prices rise, have hit record lows. But mortgage rates have not fallen as far

as the 10-year Treasury notes they track because investors who buy the loans in the secondary market are demanding greater compensation to pass up the safety of Treasuries.

The decision to refinance often comes down to knowing you will keep a loan long enough to recoup upfront refinancing costs. To calculate a break-even point, divide closing and other refinancing costs by the aftertax savings on monthly payments. Say

you're in the 28% tax bracket. If a new loan saves \$140 monthly before taxes, it will net you \$100 after taxes per month. If your refinancing costs \$4,000, it will take 40 months before any real savings begins.

If you plan to sell or refinance again before the break-even date, try for a no-cost loan with no out-of-pocket expenses, closing costs, or points—the fees paid upfront in return for a lower rate. Typically, no-cost mortgage rates are a half percentage point above those on standard mortgages. Another way to avoid upfront costs is to roll the closing costs into the loan balance. If your costs are \$5,000, you would be borrowing that much extra and paying interest on it. But you get to hold onto your cash, and the extra amount you finance will add little to your monthly payment.

A less obvious way you can save on refinancing is with an adjustable-rate mortgage (ARM). Favored when interest rates are high, they are not in fashion in this era of low inflation. ARMs come in a variety of shapes and sizes, but most guarantee a set rate for up to 10 years at a slight discount to the fixed, 30-year rate. After that, rates fluctuate with an index,

exposing borrowers to risk of higher payments. It's hard to get excited about anything but fixed-rate mortgages these days, Gumbinger says. But if you think you're going to sell before your rate starts floating, an ARM might be worth considering. In mid-October, you could find a one-year ARM at 5.56% and a 10-year at 6%.

If you're determined to get a fixed-rate loan, don't be fooled by low advertised rates. When you take them into account, a 7.5% rate from one bank might actually be cheaper than a 7.15% loan from another. Rebecca Heady, author of *The Complete Idiot's Guide to Moving Your Money* (MacMillan General Reference, \$19.95), recommends requesting ten estimates of such fees, closing charges and interest expenses over five years.

YOUR HOME

Web Resources

BANK RATE MONITOR
www.bankrate.com

FINANCE MAP
www.homepath.com

HSH ASSOCIATES
www.hsh.com

MORTGAGE BANKERS ASSN.
msn.com

MORTGAGE BANKERS ASSN.
www.mbaa.org

QUICKEN MORTGAGE
mortgage.quicken.com



"I would lock in and not gamble," says one market watcher



non length of
ership. "Add those to-
er, and your best deal
show itself," he says.
ou can also trim fees with
reamlined" refinancing,
offered by many lenders.
Norwest, current mort-
clients can save an ave-
of \$350 and 30 to 40
by skipping steps such
he credit check and
aisal.

Lower
fees are not the only
way to save. Like Levine, a
growing number of home-
owners are enrolling in pre-
payment penalty plans.
Levine gave up the right to
refinance over the next five
years, saving about 20 basis
points on his loan. If he
changes his mind, he will
have to pay his lender; Head-

lands Mortgage, six
months of interest as a
penalty. But with rates so
low, Levine figures he is
unlikely to refinance again.
"I'm done for life," he says.

Low mortgage rates
have also breathed new life
into "cash-out" refinancings,
in which homeowners
trade in old mortgages
for new ones with larg-
er balances. You can use
the cash to pay off high-in-
terest debt, fix your house,
or pay for college, but there
are risks. If paid back over
30 years, the extra borrow-
ings run up a much higher
interest tab than a shorter-
term debt. And spending
home equity jeopardizes a
crucial retirement and em-
ergency resource.

Even riskier is an inter-
est-only mortgage. Under
a plan offered by Mellon
Bank's Boston Co., clients
pay nothing but interest
for the first decade of a 30-
year loan. The rates are fixed
at first and then variable, but
the initial savings can be sub-
stantial. At a fixed rate of
6.5% for five years, the
monthly payment on a
\$600,000 interest-only loan is
\$3,250, vs. \$4,093 for a 30-
year loan at 7.25%—a differ-
ence of \$10,117 a year for five

years. Once the interest-only
option turns variable, you risk
having to pay a much higher
rate.

Typically, the interest-only
option is restricted to hold-
ers of jumbo mortgages over
\$227,150, who use the savings
to offset the extra half point
they are often charged. In re-
cent years, many borrowers
have funneled these savings
into stocks. As the market's
travails illustrate, the tactic
can backfire. "It's a great idea
if you're a great investor,"
says Roger Harrington, a
mortgage adviser in White
Bear Township, Minn. He also
counsels against taking out
shorter mortgages in favor of
a 30-year loan. With the low-
est monthly payments, a 30-
year mortgage leaves more
cash for investing.

But if you're the type to
fritter away extra cash,
you're a candidate for the dis-
cipline a 15-year loan imposes.
These shorter loans save
thousands in interest costs
(table). While monthly pay-
ments run about 20% above
those on comparable 30-year
loans, today's low rates make
them more affordable.

If your goal is to prepay
your loan, avoid programs
that charge you to do so. "Ac-
celerator accounts" impose
fees in return for accepting
the equivalent of 13 monthly
payments. "It's nothing that
an individual can't do for him-
self," said David Walz, a fee-
only planner in Oak Park, Ill.

Whether you prepay or
stick with your loan for years,
today's low rates offer lots of
savings opportunities. "This
historically low mortgage rate
comes once every two gener-
ations," says the MBA's
Lereah. So grab your calcula-
tor and start crunching num-
bers.

Anne Tergesen

Two Refi Strategies

ouple has a \$200,000, 30-year
rtgage taken out 10 years ago at
4.3%. The monthly payments are
\$19, and the total interest due
r the loan's term is \$454,847. The
ple has already paid \$201,341 in
erest, and \$16,941 in principal.
re are two scenarios for refinanc-
the balance:

	30-YEAR LOAN	15-YEAR LOAN
MORTGAGE AMOUNT	\$183,059	\$183,059
INTEREST RATE	6.92%	6.59%
MONTHLY PAYMENT	\$1,208	\$1,604
INTEREST ON NEW LOAN	\$251,848	\$105,609
TOTAL INTEREST*	\$453,189	\$306,950

*Including interest already paid on old loan

DATA: FNH ASSOCIATES

INCORPORATING YOUR COMMUNITY SPIRIT

In 1996, a group of civic leaders in Middletown, Conn., sat down to assess their town's future. Middletown, with a population of 46,000, had several problems, from an ailing downtown to poor school performance by kids from low-income families. So they decided to start a community foundation. A foundation, they reasoned, would be a good way to channel charitable donations directly to local nonprofit organizations that could address the town's needs.

The bet has paid off. Launched last year with a \$125,000 matching grant from Middletown's Liberty Bank, the Middlesex County Community Foundation now has close to \$500,000 for operating expenses and endowment pledges of \$125,000. The foundation, whose focus now includes all of Middlesex County, has made grants to an after-school program in Middletown and the public library in nearby Portland.

FLUSH CLIMATE. Community foundations date back to the early part of the century, and in the flush climate of the 1990s, many smaller communities, from rural Oceana County, Mich., to Dalton, Ga., have set up their own. They are ideally



positioned for local donors who may not have the expertise to select the best recipients and manage their gifts. For example,

if a donor wants to give \$10,000 for early childhood education, a community foundation will manage the gift in perpetuity and channel grants derived from the endowment's investments to nonprofits that fit the donor's wishes. "It's a

safer, more secure, and productive way to collect money in the community," says Michael Burns, a partner at Brody & Weiser, a Branford (Conn.) consulting firm that works with nonprofits.

If you want to start a com-

individuals to make gifts v their wills.

You will, of course, have to incorporate the foundation filing with the Secretary of State for your state, which entails a \$100 to \$500 fee. Including so, organizers should dr

a mission statement that outlines grant priorities and ways to involve the community. The foundation also must secure a 501(c)(3) letter from the Internal Revenue Service, a key step that confirms tax-exempt status and allows tax deductions for donors. Including \$500 for the filing, the tab for the entire process can run to \$2,500, and that's as low as you find a lawyer, perhaps a board member willing to work for free, says Helen Monroe, a nonprofit consultant in San Diego. It may take a day to incor

porate, but securing tax-exempt status can take up to a year.

Once it's up and running, a community foundation usually reaches a crossroads: solo or affiliate with an established community foundation. With affiliation, a startup's endowment goes into the same pot as the parent foundation's grants. It also pays a monthly fee to the parent, which takes over the backroom operations. Still, a foundation may need a staff. Many in Indiana secure a matching grant from foundations as Lilly Endowment in Indianapolis (317-5471) to pay for staffers.

Setting up a foundation is a fine way of turning neighbors' civic impulses into concrete results. The process is not easy, but the payoff is easy to see—right in the backyard. *Lawrence Str*

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Setting up a foundation is a fine way of turning neighbors' civic impulses into concrete results. The process is not easy, but the payoff is easy to see—right in the backyard. *Lawrence Str*

Foundation Facts

ORGANIZATION	PHONE/WEB SITE	COMMENTS
COUNCIL ON FOUNDATIONS	202 466-6512 www.cof.org	Provides information on all types of foundations
THE FOUNDATION CENTER	212 620-4230 www.fdncenter.org	Prefers to receive reference questions by E-mail
THE COLUMBUS FOUNDATION	614 251-4000 www.columbusfoundation.com	Conducts annual survey of community foundations

Are you wondering what's going on in the energy industry.

There are rumors, speculation and more articles than you want to read.

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As one of the most widely held stocks in America

your energy company has the financial stability to go the distance?

Southern Company is ahead of the pack.





STREETPILOT:
Directs you to city sights

held, gadgets with simple built-in maps cost around \$300 and up. The Magellan GSC 100, which sends and receives E-mail, costs \$999. Some receivers work with your laptop. For example, the \$300 Magellan Map 'N Tracker lets you hook up a GPS receiver to a laptop's communications port. You can then check out your location in real time, using maps on your hard drive.

Lugging around a laptop in the woods is hardly ideal, of course, which is why many handheld GPS units come with slots for tiny map cartridges. Lowrance Electronics' new \$449 handheld GlobalMap 100 includes a CD-ROM that contains a variety of global maps and databases, including major and rural roads for the entire U.S. You can download up to two megabytes of data from the CD to the receiver by

satellite signals for civil use so that the accuracy GPS receivers is within meters (328 feet) of your actual position 95% of the time. And some of the technology's other limitations become apparent when I sample models from Garmin, Lowrance, and Magellan in Manhattan. Although GPS is supposed to operate under all types of weather conditions, your receiver's antenna should have an unobstructed view of the sky, which is a problem in the Big Apple. The first time I tried the device, it took 5 to 10 minutes for the unit to lock onto the satellites and determine my position. Then, as I walked or drove past tall buildings, I temporarily lost reception. Fortunately, it didn't take that long for the units to mesh with the satellites again.

Aided by Garmin's

HEAVENLY GUIDANCE GETS EASIER

I'm too proud to ask strangers for directions. But I'm perfectly willing to find my way with help from above—not the religious sort, but rather an electronic gizmo that relies on satellites to keep me on course.

Wireless Global Positioning System (GPS) receivers that can help you plan routes and calculate your whereabouts have been around for a while, but the latest versions are of better quality and more affordable than their predecessors. They can be godsend if you're driving on unfamiliar roads, want to return to the area on the lake where the bass were biting, or are stuck hiking in the middle of nowhere.

GLOBAL REACH. The devices tap into two dozen satellites, the first of which was launched by the Defense Dept. 20 years ago. The orbiting birds can help you find your navigational bearings and determine where you're going. En route, the devices let you mark key places—

called "waypoints"—to make it easy to locate them later. With some GPS models, for example, you can assign tiny icons to plot whether you've passed a restaurant, rest room, or a landmark.

Only five years ago, handheld GPS models cost \$750 or more, with dealer-installed in-vehicle navigation systems commanding well above that.

Keeping You on Course

MODEL	PRICE	COMMENTS
GARMIN GPS III PERSONAL NAVIGATOR	\$299	Displays major highways, rivers, landmarks on small backlit screen
LOWRANCE GLOBALMAP 100	\$449	Handheld unit with detailed maps you can download from a CD-ROM
MAGELLAN GPS BLAZER 12	\$120	Lightweight unit displays longitude, latitude, trip odometer, but no maps

Today, a basic handheld unit such as Magellan Systems' GPS Blazer 12 costs \$120. It won't display maps, just latitude and longitude, but it can guide you in the direction you need to go, anywhere on the globe. Hand-

connecting the GPS unit to your PC. Then you can take off without the computer.

Don't expect pinpoint precision, no matter which model you buy. As a security measure, the government intentionally degrades GPS

ELECTRONICS

StreetPilot set out to find a bagel shop a few miles from my starting point. StreetPilot was loaded with a small data cartridge of New York. Garmin's optional city-specific cartridges, which cost \$99 to \$200, let you search for museums, restaurants, automatic teller machine locations, and so on.



You can display driving speed, and parameters like arrow pointing which way to go. As I approached the bagel shop, the device checked the flag again on

GSC 100:
E-mail too

StreetPilot screen. I laughed, however, a few minutes later, when StreetPilot accurately indicated that I was driving north on 42nd Street. End Avenue, but added that I was "near Weehawken." The problem is that Weehawken is in New Jersey—in the Hudson River, at least. Edward C.

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Ticketmaster Multimedia

DISCUSSION LEADERS:

ANDREW TAPSCOTT, Author, *BLUEPRINT TO THE DIGITAL ECONOMY; CREATING WEALTH IN THE ERA OF E-BUSINESS* (McGraw-Hill 1998)

JAMES F. MOORE, Founder & Chairman, GeoPartners Research, Inc.

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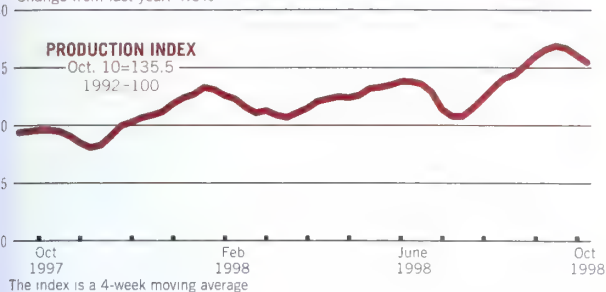
Amoco Chemicals



Business Week Index

PRODUCTION INDEX

Change from last week: -0.4%
Change from last year: 4.5%



The production index fell for the fourth consecutive week. The unaveraged index also fell, to 134.9 from 135.3. After seasonal adjustment, steel production dropped 2.5%, and the capacity utilization rate was only 78.3%—the lowest it has been all year. Electricity was down 6%, with major weekly decreases in available energy in eight out of the nine geographic regions tabulated. Coal output was also down. On the upside, autos, trucks, oil, lumber, and rail posted increases.

Production index copyright 1998 by The McGraw-Hill Companies

LEADING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STOCK PRICES (10/16) S&P 500	1056.42	984.39	11.9
CORPORATE BOND YIELD, Aaa (10/16)	6.40%	6.55%	-9.2
MONEY SUPPLY, M2 (10/5) billions	\$4,316.3	\$4,303.6r	8.3
INITIAL CLAIMS, UNEMPLOYMENT (10/9) thous	303	301r	-1.9
MORTGAGE APPLICATIONS, PURCHASE (10/16)	296.9	343.1	42.9
MORTGAGE APPLICATIONS, REFINANCE (10/16)	2,507.0	4,389.1	256.6

Sources: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Bankers Assn. (Index: March 16, 1990=100)

INTEREST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
FEDERAL FUNDS (10/20)	4.80%	5.40%	5.53%
COMMERCIAL PAPER (10/20) 3-month	5.01	5.11	5.59
CERTIFICATES OF DEPOSIT (10/21) 3-month	5.13	5.30	5.69
FIXED RATE MORTGAGE (10/16) 30-year	7.02	6.70	7.48
ADJUSTABLE MORTGAGE (10/16) one-year	5.56	5.53	5.67
RENTAL RATE (10/16)	8.00	8.25	8.50

Sources: Federal Reserve, HSH Associates, Bloomberg Financial Markets

1. Data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (10/17) thous. of net tons	2,011	1,893#	-7.2
AUTOS (10/17) units	125,816	126,646r#	-0.4
TRUCKS (10/17) units	140,452	145,974r#	-2.5
ELECTRIC POWER (10/17) millions of kilowatt-hrs.	61,583	63,058#	1.7
CRUDE-OIL REFINING (10/17) thous. of bbl./day	13,454	13,558#	-9.4
COAL (10/10) thous. of net tons	21,395#	22,305	2.1
LUMBER (10/10) millions of ft.	500.3#	489.9	6.3
RAIL FREIGHT (10/10) billions of ton-miles	28.2#	27.7	2.2

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWP1, SFP2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (10/21) \$/troy oz.	295.250	295.300	-8.4
STEEL SCRAP (10/20) #1 heavy, \$/ton	85.50	85.50	-38.7
COPPER (10/16) \$/lb.	76.5	75.5	-21.9
ALUMINUM (10/16) \$/lb.	64.3	63.5	-17.6
COTTON (10/16) strict low middling 1-1/16 in., \$/lb.	67.58	70.85	-2.7
OIL (10/20) \$/bbl.	13.18	14.02	-35.9
CRB FOODSTUFFS (10/20) 1967=100	223.60	224.10	-9.7
CRB RAW INDUSTRIALS (10/20) 1967=100	275.20	275.10	-17.4

Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (10/21)	116.95	119.34	120.72
GERMAN MARK (10/21)	1.64	1.64	1.78
BRITISH POUND (10/21)	1.70	1.71	1.63
FRENCH FRANC (10/21)	5.51	5.50	5.98
ITALIAN LIRA (10/21)	1626.0	1623.5	1740.5
CANADIAN DOLLAR (10/21)	1.55	1.55	1.39
MEXICAN PESO (10/21) ³	10.035	10.185	7.716
TRADE-WEIGHTED DOLLAR INDEX (10/21)	106.0	106.3	106.3

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan.

THE WEEK AHEAD

CONSUMER CONFIDENCE

Friday, Oct. 27, 10 a.m. EST ▶ The Conference Board's index of consumer confidence slipped to a reading of 124 for October, from 126 in September, says the index in forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. If so, then confidence has slipped for four months in a row. Uncertainty, the stock market's gyrations and political scandal are making consumers hold uneasy about the economy.

DURABLE GOODS ORDERS

Wednesday, Oct. 28, 8:30 a.m. EST ▶ New orders for durable goods likely fell 0.5% in September. That would follow strong gains of

2% in July and 1.7% in August, as vehicle orders rebounded following the General Motors Corp. strike.

EMPLOYMENT COST INDEX

Thursday, Oct. 29, 8:30 a.m. EST ▶ The S&P MMS forecast calls for a 0.8% gain in third-quarter employment costs for civilian workers. That's a shade less than the 0.9% advance in the second quarter. For the year, the cost of wages and benefits would be up 3.4% in the third quarter, the same increase as in the second quarter.

GROSS DOMESTIC PRODUCT

Friday, Oct. 30, 8:30 a.m. EST ▶ Real gross domestic product probably grew at an annual

rate of 2.2% in the third quarter, says the S&P MMS survey, slightly better than the 1.8% pace in the second. However, final demand likely slowed sharply last quarter, as the consumer, business, and government sectors all eased up on purchases. Foreign trade subtracted from GDP growth again. Inflation, as measured by the GDP price deflator, likely stood at an annual rate of 1.2% last quarter. Prices rose at a 0.9% pace in the second quarter.

NEW-HOME SALES

Friday, Oct. 30, 10 a.m. EST ▶ New single-family homes probably sold at an annual rate of 845,000 in September, a gain from 838,000 in August.

This Week, Online

Business Week presents frequent live conferences and chats on America Online—your opportunity to ask questions about timely topics.

BusinessWeek **ONLINE**

Sunday

Where ya gonna get the cash to run your company? Find out in a BW Enterprise chat with David R. Evanson, author of *Where to Go When the Bank Says No*.

Oct. 25, 9 p.m. EST

Tuesday

Small caps: Back in style? Standard & Poor's investment officer and equity analyst Mark S. Basham provides some answers in an investing conference co-hosted by BUSINESS WEEK and S&P Personal Wealth.

Oct. 27, 4:30 p.m. EST

Thursday

Join guest Brian J. McMahon, president and CIO of Thornburgh Funds, to get the lowdown on where muni bonds fit in your portfolio now.

Oct. 29, 9 p.m. EST

Transcripts of all conferences are available for downloading from the BW Online area on AOL soon after each event.

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

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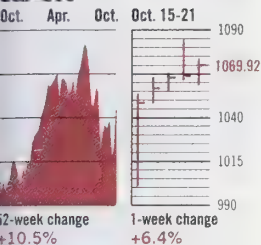
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Investment Figures of the Week

STOCKS

S&P 500



COMMENTARY

The U.S. markets staged a comeback, with six straight days of gains. The big activity was on Oct. 15, when the Federal Reserve's quarter-point cut in overnight lending rates sent stocks climbing. The Dow Jones industrial average surged 331 points on that day, and the S&P 500 and NASDAQ composite were also strong winners. The dollar fell to 114 on Oct. 19, but rose on Oct. 20 and 21 because of optimism over whether Japan will bail out its ailing banks. The dollar gained against the yen as well.

U.S. MARKETS

	Latest	% change Week	% change Year
Dow Jones Industrials	8519.2	6.9	6.0
NASDAQ Combined Composite	1674.8	8.7	-2.0
S&P MidCap 400	316.8	8.0	-6.3
S&P SmallCap 600	151.9	12.4	-19.8
S&P SuperComposite 1500	224.8	6.7	7.5

SECTORS

	Latest	% change Week	% change Year
Bloomberg Information Age	361.5	6.7	19.8
S&P Financials	116.7	11.1	0.5
S&P Utilities	250.8	-3.2	18.8
PSE Technology	331.2	8.8	-0.5

FOREIGN MARKETS

	Latest	% change Week	% change Year
London (FT-SE 100)	5206.6	3.3	1.1
Frankfurt (DAX)	4523.2	4.7	8.4
Tokyo (NIKKEI 225)	14,216.3	8.8	-19.6
Hong Kong (Hang Seng)	9662.1	9.3	-17.0
Toronto (TSE 300)	5848.4	4.5	-18.4
Mexico City (IPC)	3850.5	7.1	-27.3

FUNDAMENTALS

	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.49%	1.60%	1.56%
S&P 500 P/E Ratio (Last 12 mos.)	26.7	24.0	24.3
S&P 500 P/E Ratio (Next 12 mos.)*	20.7	19.3	19.2
First Call Earnings Surprise*	1.36%	5.04%	2.42%

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 200-day average	1069.6	1067.6	Positive
Stocks above 200-day average	23.0%	17.0%	Positive
Options: Put/call ratio	0.54	0.80	Negative
Insiders: Vickers Sell/buy ratio	0.46	0.47	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Household Products	22.8	Drug Chains 66.9
Machine Tools	22.3	Genl. Merchandise Chains 59.2
Paper Containers	21.5	Specialty Appar. Retailers 47.5
Cosmetics	21.4	Broadcasting 40.8
Steel	19.9	Drugs 38.6

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Health-Care Services	-12.2	Oil & Gas Drilling -60.7
Photography/Imaging	-10.3	Metals -44.8
Hospital Management	-9.0	Oil-Well Equip. & Svcs. -40.3
HMOs	-8.5	Leisure Time -39.6
Personal Loans	-6.7	Machine Tools -36.2

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

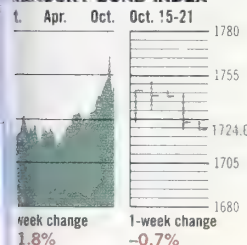
	Price	1-month change
Intel	84 7/16	-1 1/16
Merck	130 7/8	-5
Citicorp	79 13/16	-16 13/16
Pfizer	96 11/16	-1 1/8
Eli Lilly	75 3/8	-1 5/16
Amgen	74 1/16	-1 7/16

Decline ahead? Stocks with most significant selling on price strength

	Price	1-month change
MCI WorldCom	50 15/16	3 7/16
Tellabs	46 5/8	2 9/16
Washington Mutual	41 1/4	5 1/2
Ciena	12 13/16	1 13/16
CMG Information Services	47	2 1/4
L.M. Ericsson-ADR	21 3/8	1 9/16

INTEREST RATES

TREASURY BOND INDEX



Bloomberg Financial Markets

KEY RATES

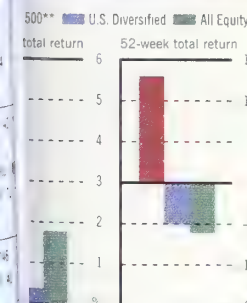
	Latest week	Week ago	Year ago
MONEY MARKET FUNDS	4.93	4.97	5.13
90-DAY TREASURY BILLS	3.96	4.02	5.16
6-MONTH BANK CDS	4.57	4.64	5.19
1-YEAR TREASURY BILLS	4.03	4.19	5.58
10-YEAR TREASURY NOTES	4.57	4.58	6.12
30-YEAR TREASURY BONDS	5.07	5.00	6.41
LONG-TERM AA INDUSTRIALS	6.28	6.27	6.89
LONG-TERM BBB INDUSTRIALS	7.05	6.94	7.26
LONG-TERM AA TELEPHONES	6.67	6.75	7.22

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	Last week	30-yr. bond Latest week	Last week
GENERAL OBLIGATIONS	4.04%	4.02%	4.73%	4.71%
PERCENT OF TREASURIES	88.43	87.26	93.29	93.64
TAXABLE EQUIVALENT	5.86	5.83	6.86	6.83
INSURED REVENUE BONDS	4.18	4.17	4.96	4.94
PERCENT OF TREASURIES	91.50	90.52	97.82	98.22
TAXABLE EQUIVALENT	6.06	6.04	7.19	7.16

MUTUAL FUNDS



orningstar, Inc.

EQUITY FUNDS

Leaders	4-week total return	%	Laggards	4-week total return	%
Matthews Korea A	37.8		American Heritage	-22.0	
Newport Tiger T	33.7		PBHG Select Equity	-14.8	
Wright EquiFd.-Hong Kong	32.7		OVB Emerging Growth A	-13.2	
Newport Tiger Cub B	31.6		Profunds UltraOTC Investor	-11.0	
Newport Greater China A	29.8		PBHG Tech. & Commun.	-10.8	
Leaders	52-week total return	%	Laggards	52-week total return	%
Smith Barney Telecomm. Inc.	42.3		Lexington Troika Russia	-88.2	
Berger Balanced	41.6		Frontier Equity	-66.4	
Sequoia	33.6		American Heritage	-64.2	
Icon Telecomm. & Utilities	30.3		Vontobel Eastern Europ. Eq.	-62.1	
Wright EquiFd.-Belg./Lux.	29.2		Dreyfus Aggressive Growth	-60.9	

EQUITY FUND CATEGORIES

Leaders	4-week total return	%	Laggards	4-week total return	%
Pacific/Asia ex-Japan	18.0		Small-cap Growth	-4.0	
Diversified Pacific/Asia	12.4		Real Estate	-3.8	
Precious Metals	10.1		Small-cap Blend	-2.9	
Japan	8.7		Health	-2.9	
Latin America	7.8		Technology	-2.9	
Leaders	52-week total return	%	Laggards	52-week total return	%
Utilities	15.8		Latin America	-48.1	
Large-cap Growth	6.4		Diversified Emerging Mkts.	-43.7	
Large-cap Blend	6.0		Pacific/Asia ex-Japan	-36.7	
Communications	5.7		Precious Metals	-33.5	
Domestic Hybrid	4.0		Natural Resources	-32.1	

re as of market close Wednesday, Oct. 21, 1998, unless otherwise indicated. Industry include S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Oct. 20. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

COMING TO GRIPS WITH MICROSOFT

The opening session of the antitrust trial against Microsoft looked more like a street fight than a legal proceeding to determine the fate of the most successful high-tech company in the world. The government called Bill Gates a liar, and Microsoft responded by ridiculing the Justice Dept. lawyers as ignorant "luddites." There may, of course, be reasons for this public vitriol, but it is important to take a moment to understand that few things matter more to the long-term economic health of the U.S. than the correct outcome of this trial. Microsoft is at the very heart of the high-tech economy that is driving growth and prosperity in America. The legitimate issues raised by this power must be resolved in ways that do not destroy the country's entrepreneurial culture.

Indeed, the initial battle appears to be over the nature of that high-tech culture. The government is painting a picture of Microsoft as a monopolistic bully that leverages its dominance of computer operating systems into control of other digital markets. Justice argues that Microsoft kills competition, hurts innovation, and is a threat to the free market.

Huh? That's Microsoft's reply. Who are you talking about? Microsoft says its abrasive, in-your-face, cutthroat behavior is just Silicon Valley culture. Everyone kicks butt, works 20-hour days, and tears the eyeballs out of the competition. Microsoft accuses Washington of putting Silicon Valley's way of life on trial. Its defense, the company says, is the similar behavior of other hot-shot high-tech companies such as Oracle. On the Internet, all the players are going 95 miles per hour.

But not everyone is big enough to own the road. Even if Microsoft is doing nothing more than other high-tech companies, power changes everything. Microsoft does, after all, have more than a 90% market share in operating systems, the heart of personal computers. Monopoly is the issue, not culture and the behavior that goes with it.

But that is what Microsoft refuses to accept, and why this antitrust case has elements of a classic tragedy. Our guess is that Bill Gates, who built an empire from scratch,

can't conceive of being punished for his success, and neither can the thousands of people working for him. They undoubtedly see themselves as quintessential capitalists.

So did John D. Rockefeller and the people who ran Standard Oil in the antitrust trial that opened this century. After all, Rockefeller standardized a chaotic industry, stabilized prices, and delivered an essential good to the masses. That parallel with Gates and Microsoft is telling. And so, perhaps, might be the irony associated with the government's victory over Standard Oil. Even as the government was breaking up the energy giant in 1911, the market was already moving to take away its monopoly. Had there been no legal action, Standard Oil would have lost its dominance anyway.

The high-tech market is moving far faster than the market of that era. In just one year's time, what appeared to be Microsoft's dominance in a whole array of niches and markets is already eroding. Washington complained then that Microsoft controlled the first screen that popped up when people opened their personal computers from Dell, Compaq, and other manufacturers. It could channel consumers to Net services and companies owned by and allied to the software giant.

Not anymore. Today, the same computer companies are linking directly to portals on the Net in alliance with Yahoo, Excite, and others, circumventing Microsoft. In addition, the cable industry, led by John C. Malone, is boosting rival Microsoft's Java software. And Microsoft's direct forays into electronic commerce are having a mixed reception from consumers. It may be that competitors are more emboldened by the government's pressure on Microsoft. Even so, technology and markets are moving at lightning speed.

It's too soon to tell if the last major antitrust trial of the century will end like the first—or whether it should. The best to promote competition and innovation in a fast-changing high-tech economy is a question with no simple answer. Corporate behavior that limits competition and choice has to be checked. But in the end, Microsoft's fate will largely be determined by the markets.

NETIZENS DESERVE THEIR PRIVACY

Europe, with a mere 15% of Web traffic, is setting out to protect privacy in cyberspace. On Oct. 25, the European Union Data Protection Directive goes into effect, and unless the U.S. and Europe quickly agree on how it is implemented, electronic commerce on the Net could grind to a halt and the first digital trade war ensue.

The European approach relies heavily on government intervention. Germany's data police, the Datenschutz, regularly travel from Berlin to Citibank's giant data-processing center in Sioux Falls, S.D., to check that the information on four million German credit-card holders is being handled accord-

ing to European law. After Oct. 25, commissioners in Brussels will have the legal tools to prosecute companies that block Web sites that don't live up to strict standards of data privacy (page 49).

Washington is negotiating for a more voluntary standard on the U.S. side. It calls for self-regulation and for software to let customers decide if they're willing to hand over their personal data, to what end, and with whom.

It is essential for the U.S. and Europe to reach an agreement that guarantees privacy in cyberspace. Without it, people will never feel comfortable conducting business on the

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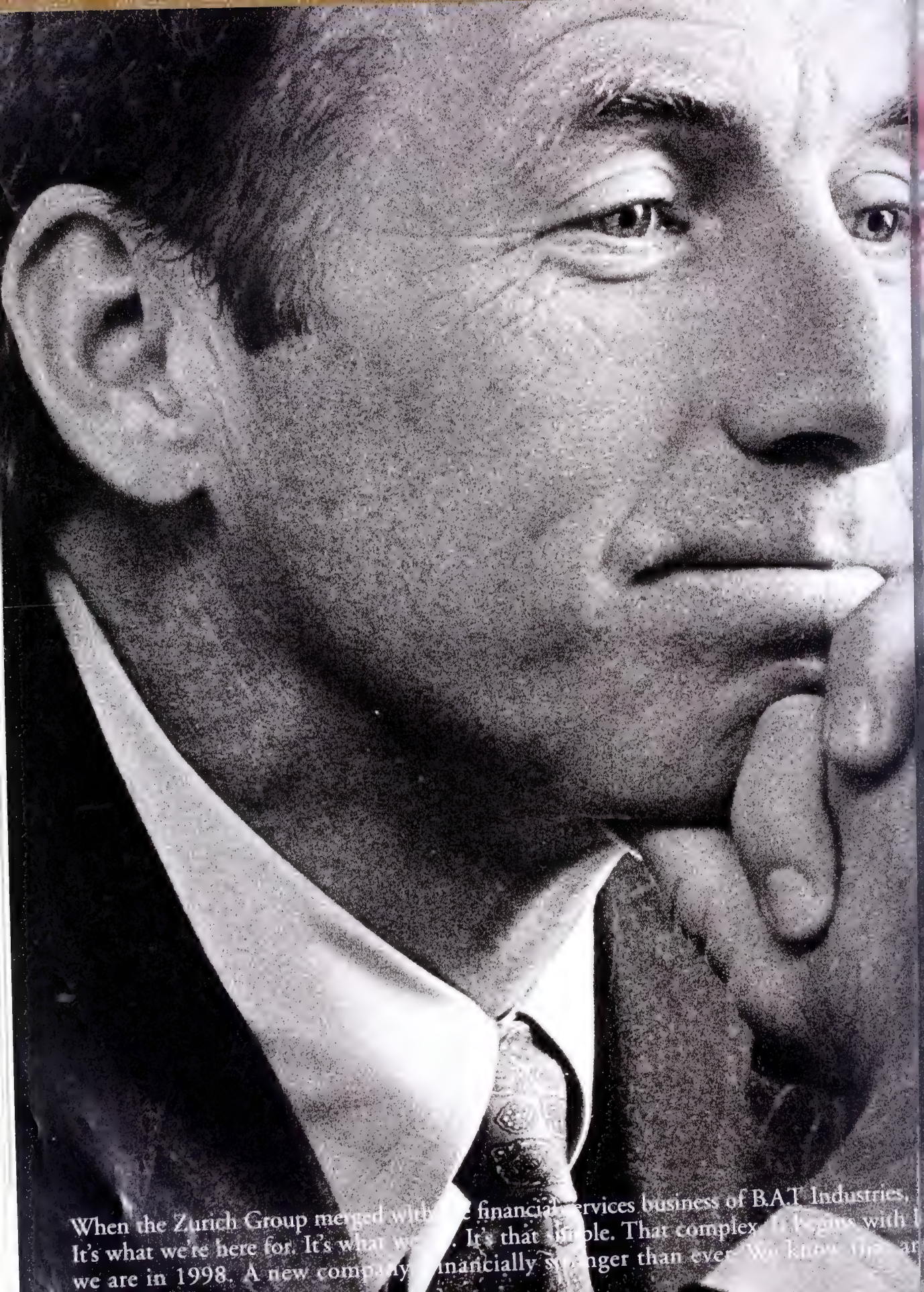
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INVESTING

The economy is slowing.

What's your next move?



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BURLINGAME

OCT 30 1998

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Up Front

EDITED BY JOAN OLECK

HONCHOS

BUDDIES TWICE REMOVED

YOU'VE HEARD THE six-degrees-of-separation theory: We're all connected by a chain of acquaintance—of six links or less. In the Microsoft trial, it turns out, foes Bill Gates and Justice Dept. antitrust chief Joel Klein have just two degrees. The critical link? Robert Denham, former Salomon Inc. chairman.

Denham and Klein have stayed pals since Harvard Law School days in the '70s: After Denham left Salomon in 1997, Klein requested help on the Microsoft suit. Denham, who Klein says "has a real-world businessman's perspective" on the trial issues,



DENHAM: *The Microsoft link*

quietly signed on as a consultant last February. He won't discuss what he did for Justice, but he seems to have been a close adviser to Klein. The evidence? Netscape CEO James Barksdale's Oct. 20 testimony that Klein and Denham questioned him at home in Palo Alto earlier this year about how to rein in Microsoft.

Now, guess who installed Denham as Salomon chairman: It was financier Warren Buffett, a bridge buddy of Gates. With Denham practicing law again, Buffett's Berkshire Hathaway figures again to be a chief client. Will that cause tension? No way, Denham vows, insisting there's no link. He had better hope Buffett agrees. *Mike France*



POLITICAL HAY

FLYING IN THE FACE OF COMMON SENSE?

EVEN AS THEY TAKE A beating from the flying public over high ticket prices, the Big Seven airlines plan to make a Presidential campaign issue out of government efforts to inject more competition into the industry.

How do you persuade people to vote for the candidate who will give the airlines their way? Listen closely: The Transportation Dept. has

MONOPOLY: Airlines love it

proposed rules that would ban predatory pricing—say, a big airline cutting prices to lock a small rival out of a route. Airlines say the rule would deny passengers lower prices. Congress has ordered the DOT not to impose the rule before late '99, as the campaign begins. "By injecting Presidential politics into the debate, we hope to change the political dynamic and make it difficult or impossible for DOT to act," Air Transport Assn. (ATA) President Carol Hallett wrote in a recent memo.

Expect a consumer counterattack. Kevin Mitchell of the Business Travel Coalition, says fliers won't buy the ATA logic, which he calls a "kamikazelike mission." But the ATA won't be alone. Pilot unions and the U.S. Chamber of Commerce are in its camp. *Lorraine Woellert*

TALK SHOW "He wanted me to be Joseph Stalin. I told him I resented that. I wanted to be Winston Churchill, but he didn't want me to be that."

—Netscape CEO Jim Barksdale, at the Microsoft trial, on how he and AOL exec Steve Case styled themselves as "the Allies."

PRODUCT PEEK

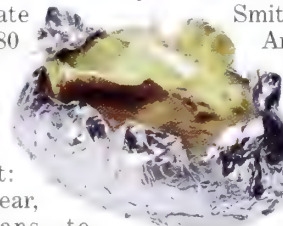
SCHMEAR CAMPAIGN: IT'S J&J VS. UNILEVER

LET THE MARGARINE WARS begin. Johnson & Johnson is poised to launch Benecol, a margarine with the key ingredient plant stanol ester. Studies show it cuts "bad" cholesterol by up to 14% if you eat it regularly. The product debut, set for the week of Nov. 2, in Portland, Ore., kicks off a marketing campaign that industry sources estimate could run to \$80 million.

Could be that J&J is feeling some competitive heat: Early next year, Unilever plans to launch a similar margarine, Take Control. Unilever further plans to expand its cholesterol franchise to other products; J&J already has a

related salad-dressing line the works.

First out of the box, will mount a consumer print, and radio ad campaign and appeal directly to doctors, dieticians, and druggists. Also in the mix: real-life stories of consumers who successfully cut their cholesterol using Benecol. The package could be sweet: Salomon Smith Barney analyst Anne Malone predicts that, if Benecol takes off, it could



YUMMY: *Benecol does less harm*

generate more than \$100 million in sales. "This could be a sleeper," says of J&J's Benecol. Unilever, put that on a muffin. *Amy Berman*

THE LIST PRIVATE SCHOOLS' TOP EARNERS

The heads of three universities earned \$500,000-plus in 1996-97, while 10 others exceeded \$400,000. Some 46 in all—almost 10% of presidents surveyed—earned more than \$300,000.

1. TORSTEN WIESEL, Rockefeller	\$546,966
2. JOE WYATT, Vanderbilt	525,496
3. JUDITH RODIN, Pennsylvania	514,878
4. GEORGE RUPP, Columbia	458,480
5. JAY OLIVA, NYU	451,643
6. RICHARD LEVIN, Yale	447,265
7. JAMES SHUART, Hofstra	438,554
8. ROBERT MEHRABIAN, Carnegie Mellon	436,164
9. WILLIAM BRODY, Johns Hopkins	435,592
10. STEPHEN TRACHTENBERG, George Washington	425,041

*Survey of 475 presidents, based on tax forms. Earnings reflect total compensation (pay, benefits, extras like deferred compensation and bonuses). DATA: THE CHRONICLE OF HIGHER EDUCATION

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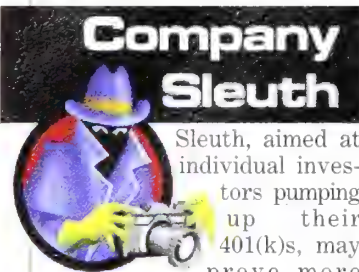
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Select up to 10 publicly traded companies to track, and www.companysleuth.com starts scouring the Internet

for clues about their activities. Each morning it reports to your E-mail box about the most recent insider trades, trademark registrations, and patent applications.

"People resonate with this new service because it puts everyone on equal footing," boasts Joshua Kopelman of Infonautics, the service's creator. He says the site means investors no longer must rely on analysts, journalists, and companies for information. But Forrester Research analyst Bill Bass counters, saying, "The average Joe sitting at his computer isn't going to get very excited about finding a new trademark registration." Adds Bass: "It's the people working in competitive intelligence for big companies that are going to be slobbering all over themselves. Their jobs just got a lot easier." *Jeanette Brown*

TASTE SENSATIONS

SUSHI BARS: WHAT COMES AROUND...

WITH RECESSION HITTING their island nation hard, the Japanese are economizing—even in their sushi bars. The rice-and-fish *nigiri* have always been popular, but what has really taken off is *kaiten zushi*—sushi via conveyor belt.

That's right. A moving belt, not a cook, delivers sushi made with tuna, salmon roe, and other delicacies.

Cooks fill the merry-go-round, instead of patron orders, and customers pay according to the number of plates they've collected.

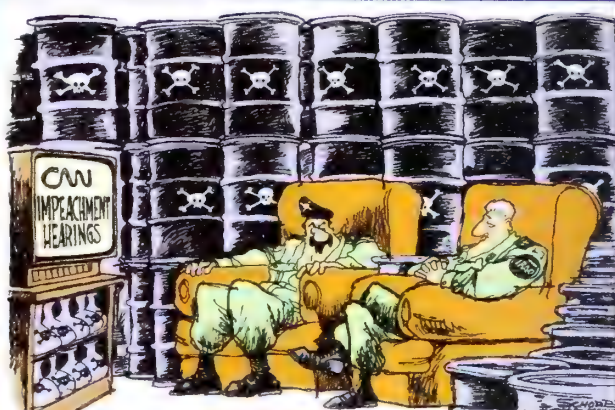
Those plates are stacking up: The rotating sushi business grew by 4% last year, to \$2.9 billion, and it will increase an additional 3% to 4%



FAST FOOD: Sushi on a conveyor belt

at standard sushi shops. Customers are so wowed by the deal that they're braving waits of up to an hour. Owners are benefiting, too, because diners get their fill and move on faster. Hmm... maybe there's a lesson here for other struggling Japanese industries. *Miki Tanikawa*

DRAWN & QUARTERED



"SURE, THEIR BOMBS ARE SMART, BUT THEIR LEADERS ARE STUPID..."

CHARITY CASES

FROM LOOKING GOOD TO DOING GOOD

"TOTALLY NATURAL AND AN obligation" is how fashion designer Oscar de la Renta describes his decision to spearhead a \$175,000 aid campaign for the hurricane-ravaged Dominican Republic. Says the designer: "I am a Dominican."

When Hurricane Georges devastated the island de la Renta called home until age 17, he was quick to act. First he turned to his friend Julio Iglesias, the recording artist, for funds. Next on his list: Gustavo Cisneros, CEO of Cisneros Group, whose holdings include the Puerto Rican su-

permarket chain Pueblo. la Renta hoped the food could be purchased at cost. Cisneros made it happen.

Financier Henry Kravis came on board; so did *Washington Post's* executive committee chair Katharine Graham, who didn't even wait to be asked. Together, the group raised the \$175,000, which purchased 350,000 pounds of rice, beans, baby food, tuna, and more. The shipments were transported by AmeriCARES, a disaster-relief group. In short, the food was distributed by the Catholic Church.

Is de la Renta pleased with his effort? Pleased, yes, but not yet satisfied. "I need to do plenty more," he says. *Jeanette Brown*

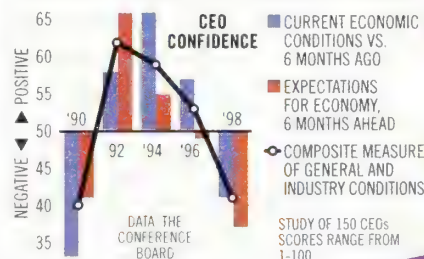


DESIGNER AID: De la Renta

THE BIG PICTURE

THE VIEW FROM THE CORNER OFFICE: BLEAK

Chief execs' confidence in the national economy during the third quarter of 1998 plummeted to its lowest point in more than seven years. Their outlook for the next six months is particularly somber.





PUSHING THE ARTFORM



Wynton Marsalis, the most acclaimed jazz musician and composer of his generation, as well as distinguished classical performer. Recipient of the Grand Prix du Disque of France, Edison Award-Netherlands, 23 Honorary Doctorates, and 1997 Pulitzer Prize for Music: The first ever for jazz.

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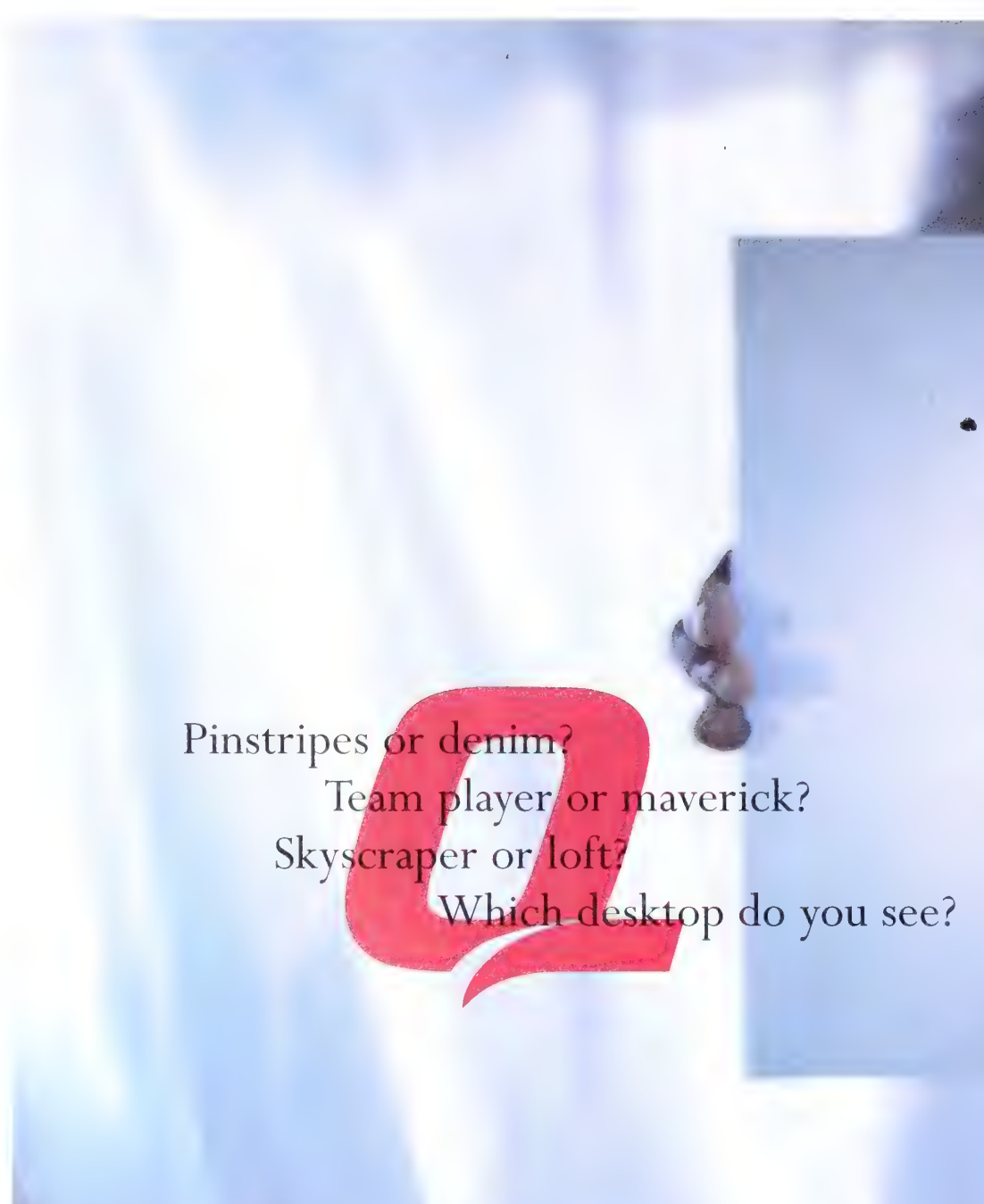
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THE BEST B-SCHOOLS: REHASHING THE RANKINGS

I appreciate the effort that went into "The best B-schools" (Special Report, Oct. 19). The problem I have with the survey results is that the rankings fail the important "common sense" litmus test. Not to take anything away from the quality of the schools on the list, but to rank four schools ahead of Harvard University and eight schools ahead of Stanford University seems to compromise the value of the survey. Do you really believe that recruiters would give the highest post-MBA median pay and the highest average number of job offers to the two schools they feel are only sixth and ninth best?

Do you really think the two schools that can afford to be the most selective are viewed as only No. 8 and No. 13 by students?

Rick MacDonald
San Francisco

You overlooked what we believe to be the most important factor affecting the quality of a business education: the student body. We cannot understand how one can measure the caliber of a B-school without analyzing objective measures of the students at those schools (i.e., GMAT scores, grade-point averages, and overall selectivity). Relative to Stanford, you stated that recruiters were "frustrated" because many of our grads chose to join smaller, entrepreneurial ventures rather than traveling down more traditional corporate paths. As a result, Stanford's rank was "affected."

So you're saying that because Stanford students are so sought after, Stanford is not as "good" as other schools that generate less competition for their graduates. That seems counterintuitive. Students typically go to business school to have as many options as possible upon graduation, not to be popular among corporate recruiters.

Finally, by failing to survey Silicon

Valley startups and the like, you ignore one of the most important and fastest growing segments of our economy. Why not try interviewing more entrepreneurial ventures and ask them what they think of various MBA graduates? You might discover a very different set of rankings.

Adam L. Fawcett

New York

(and 46 co-signatories from the Stanford B-school classes of 1991, 1999, and 2000)

Having gone through the Wharton School's job-search process as an MBA student, I am proud that I was successful in landing a job I wanted. However,



QUALITY CONCERNS

"We cannot understand how one can measure the caliber of a B-school without analyzing objective measures of the students."

had many peers who were not so lucky. In large part, they were hurt by Wharton's own recruiting procedures. Wharton has one glaring flaw in the recruiting process that puts both its students and recruiters at a disadvantage: It does not afford students the opportunity to interview their top-choice firms through an open bidding process. Students must wait for interviews (with points that Wharton has allocated to them) in case they were not selected for recruiting through a firm's invitation-only schedules.

While Wharton allows firms to meet students through an open-bid process, it does not require that they do so, unlike most top schools. For the topmost-sought-after consulting and investment-banking firms that recruit Wharton students, substantially less than 10% of the interviews occur through an open-bid process. This year, only 10 of the 30 firms will even offer an open-bid

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CORRECTIONS & CLARIFICATIONS

"The best B-schools" (Special Report, p. 19), some of the tuition figures listed are for 1997-98, not 1998-99, as the table specified. Here are the correct 1998-99 tuition figures for those schools:

Wharton	\$26,290	Carnegie Mellon	\$24,130
MIT	25,900	MIT	27,100
Columbia	27,770	UNC	16,100
Wake Forest	25,250	Maryland	14,048
Duke	24,400	Wisconsin	16,634
North Carolina	26,100	Purdue	15,424
Virginia	21,479	USC	23,958
Yale	27,248		

As a result, students don't necessarily get to interview with their top-choice firms, and firms may be denied opportunity to talk to students who are most interested in them. Almost all of the next 11 ranked schools in your survey do better than Wharton on this account, many requiring all firms to have open-bid schedules, some designating that at least 50% of all interviews be open-bid. Wharton has been aware of this problem for years but yet has taken no action to correct it until Wharton corrects this flaw, it is no business being your No. 1 school.

David Morris
Wharton MBA Class of 1995
New York

It seems inconsistent that the University of California at Los Angeles is No. 1 in terms of its placement record, and yet the school merits only an 11th-place finish in your poll. UCLA has a relatively small class size of just over 1,000 students, which is less than half that of 1st-place finisher Wharton. Since you claim to have given the smaller schools an upward adjustment to counter any size-related bias, it must just be a coincidence that the top six schools in your poll also happen to be the top six schools in terms of size—again. This correlation is also apparent in your 1996 survey, which provides further evidence of big-school bias. As for the graduate school, if my experience was any indication, it is easy to see why UCLA consistently ranks near the top: I got an excellent job after graduation, the ideal job after graduation—and I got to live at the beach.

Kenneth F. Broad
San Mateo, Calif.

"How we kept the data unsullied" (Special Report, Oct. 19), MBA students at the University of Texas at Austin were characterized as trying to "game" recent rankings, and the school was penalized as a result. Your article misrepresents our program and discredits

the improvements our administration, faculty, staff, and students have made during the past two years.

There has been a large jump in student satisfaction since your last survey, but it was not driven by a memo circulated by student leaders. If it had been, then it is not likely we would have also seen triple-digit growth in the graduating class gift, or independent surveys indicating high student satisfaction.

The student memo does not suggest that the survey be answered untruth-

fully. Its goal was to point out that the scale and descriptive labels are misleading. Unless your survey methodology is revised, or raw results are published along with the letter grades, students have no option other than to form their own opinions and interpretations of the relative scale.

There is widespread knowledge that discussions of the BUSINESS WEEK ranking scale have gone on at many top schools for years. Your acknowledgement of this reality would have lowered the

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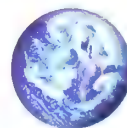
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Readers Report

acity of your own ranking scheme, haps explaining why you ignored the lence, some of which was forwarded you earlier this year. Fairness would ate a full investigation with all schools ng treated equally in score adjust- ts; holding up just a few examples airly penalizes the targeted schools.

At our campus, Dean Ramesh Rao his staff, in cooperation with our icated faculty, have gone to great gths to ensure that the student ex- ience at Texas business school is ng the finest in the country. We are ad of our accomplishments but be- e your selectivity does injustice to program and to those who have ked so diligently to create an out- ding educational experience for us.

David S. Naismith
MBA Class of 1999
University of Texas
Austin

our clinical tone suggests that the lent-survey component assesses in e meaningful way the "voice of e who paid thousands of dollars for r education." As a 1988 graduate of University of Texas (one of the five ols downgraded as a result of al- d student-survey manipulation), al- me to suggest that it does nothing ie sort. The student survey is a du- s measure, even if its data were illied, and one that increasingly icizes and taints your results.

y your credit, the BUSINESS WEEK ing is the most widely referenced ssment of top MBA programs. Also, results appear to exert a residual ence upon corporate impressions, each, and ultimately salaries. All makes the integrity of the results just a curiosity among MBA alumni rather a matter of public policy. surprisingly, the importance of the ngs has gradually led students ss the country to revise upwardly opinions of their alma maters.

ie notion that only five B-schools systematically sought to improve rankings by encouraging favorable ones on this survey is laughable. penalizing schools and their stu- s, with all the hard-dollar and ca- consequences that the ranking en- is unconscionable. Heaven forbid students who take pride in their experiences and wish to trumpet i via the BUSINESS WEEK ratings d encourage their classmates to do same. Instead, proud but honest ents attending B-schools of lesser re must fear that too many favor- responses will result in their survey

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Readers Report

ng tossed out, downwardly adjust-
or—worse yet—their school being
luded from the rankings entirely.

J. Cameron Humphries
Manhattan Beach, Calif.

was disappointed that you excluded
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New York University's Stern School
Business, I faced the same academic
l as full-timers, with the added chal-
ge of factoring a demanding job into
education. What better evidence of
agement skills than balancing these
ssures successfully? By the time I
uated, after attending B-school for
years part-time, I had a better
sp on how to apply what I had
ned. There is an inherent snobbery
only featuring those who could af-
l not to work for two years.

Diana Erani
Norwood, Mass.

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tely, we have had to enforce.

Sally Lannin
President
MBA Strategies
Edina, Minn.

ere are two observations on your
odology in ranking the top B-
ols. Graduates' expectations are pro-
onal to the prestige of the universi-
ey have enrolled in. So Ivy League
s tend to be more severe in their
ations than their peers in less fa-
schools. And the salaries offered by
recruiters are the most objective
sure of the quality of the grads and
eir schools, since companies are sup-
d not to pay more for less.
l in all, it seems much simpler and
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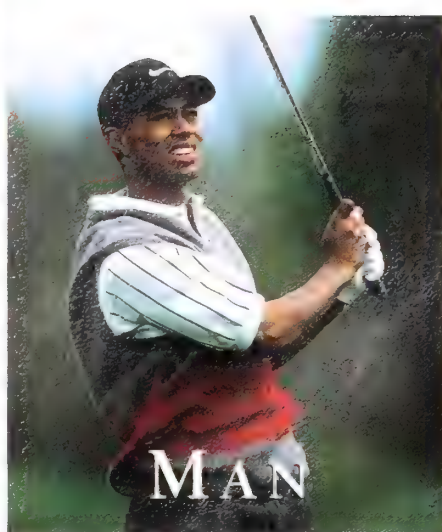
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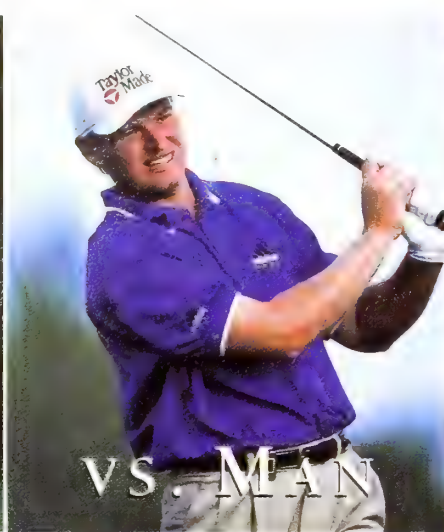
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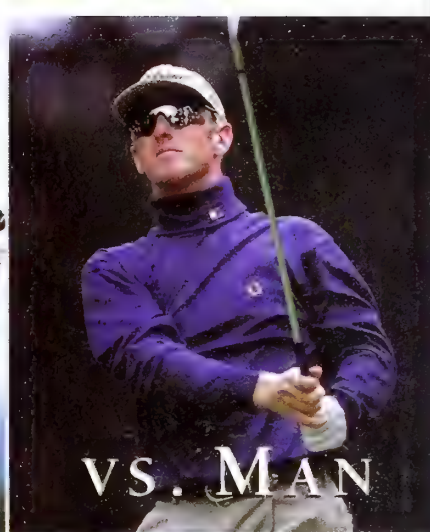




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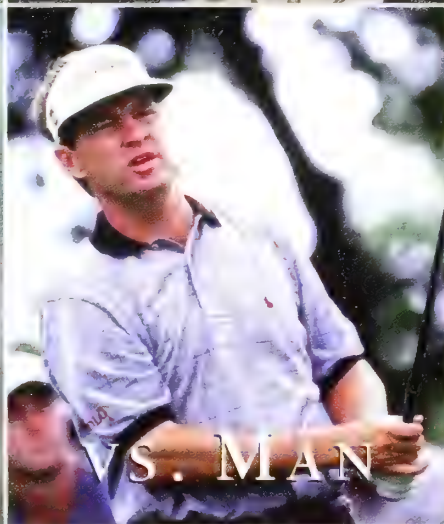
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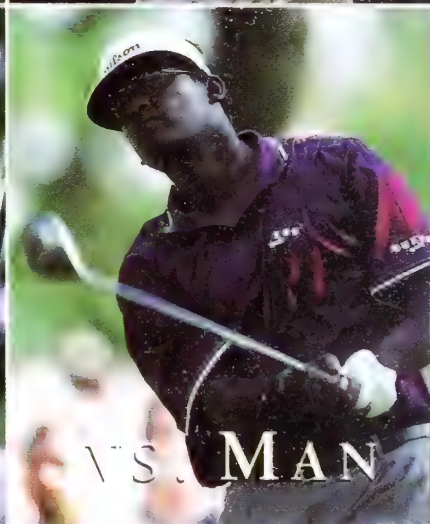
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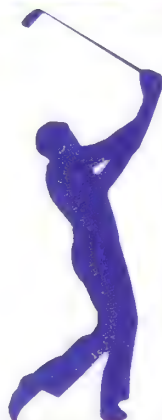


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São Paulo

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N PATIENTS HANDLE ALL THIS ACCUSTOMED POWER?

"A cyber revolt in health care" (In-
nation Technology, Oct. 19) is mis-
ling. After more than 25 years of
lical practice, I remain unaware of
shifting power balance between my-
and my patients. I think of the
lth-care professions as dedicated to
ching and healing, not to exercising
ver. Power shifts will not measur-
y improve public health.

What will patients gain from their
found power? The examples cited
of uncommon diseases and novel
tments. Aside from the question of
appropriateness of seeking unproven
tments, this approach ignores major
S. public-health problems. Will the
o eliminate poverty and limited ac-
s to health care for tens of millions?
it eliminate teen pregnancies? Alco-
tobacco, and drug use? Not likely.

Arthur G. Robins M. D.
Andover, Mass.

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onomic Viewpoint, Oct. 19) reminds

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Readers Report

of an old story about two University of Chicago professors: Walking down a street, one of them spied what looked like a \$100 bill lying on the sidewalk. "Hey, I think that's a \$100 bill. It's stop and pick it up," said one. "No, don't bother," replied the other. "That's not a real \$100 bill: Since the market is efficient, a real \$100 bill would have been picked up long ago."

The point of the story is that markets are efficient precisely because speculators such as those at Long-Term Capital Management are there to scoop up any price change that may fall to the sidewalk of the marketplace. Occasionally they may slip and fall, but as long as they don't take down anyone else, we would not be so quick to kick them while they are down.

Hans Hsu
Greenwich, Conn.

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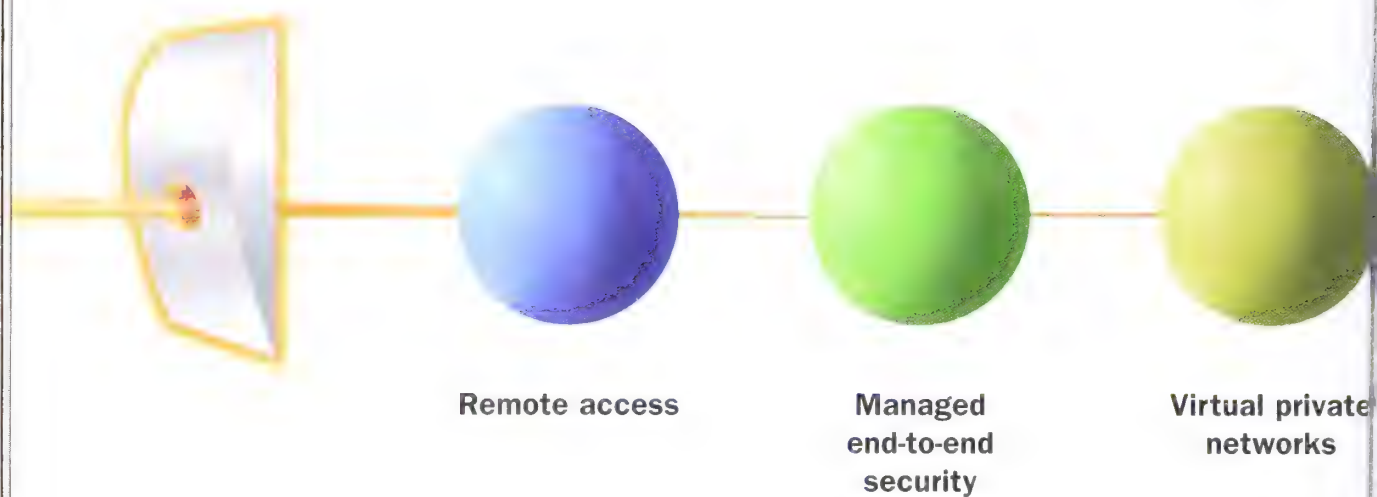
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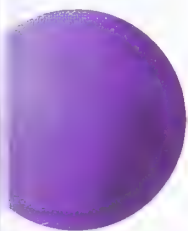


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BY JEFFREY E. GARTEN

CUTTING FAT WON'T BE ENOUGH TO SURVIVE THIS CRISIS



MOVE FAST:
In dangerous times, being nimble is everything. So farsighted companies are rebuilding themselves as quickly as they can

It will take years to build the "new global financial architecture" that President Clinton and other officials want, but business leaders can't wait that long. Facing slower growth around the world, volatile markets, and fierce competition from products priced in cheap currencies, many CEOs are restructuring their companies. Their efforts, however, are likely to fall short of what's needed.

Some companies, such as Raytheon and 3M, are announcing big cost-saving layoffs. This may please Wall Street, but pink slips do nothing to improve a company's products and sales, and they can destroy morale and productivity.

Other companies, such as Daimler and Chrysler, are merging to achieve global scale. But the sheer effort needed to mesh corporate cultures and operating systems can drain energy from the push to improve overall competitiveness.

A third group is on a more promising track—restructuring internal operations to make them more nimble. These companies are asking such questions as: How do you eliminate unnecessary layers of supervision? How do you reduce development costs and get products to market faster? How do you strike the right balance between being global and local?

Even before the current financial turmoil, for example, Ford, responding to rapid changes in the global economy, began to implement a major reorganization. In 1994, it announced its plan to sell essentially the same cars around the world. It ended competing regional fiefdoms by consolidating engineering, design, and development within new global divisions.

Motorola, facing fierce Asian competition and falling profits, announced a plan with similar features last July, replacing many decentralized and competing businesses with three distinct global groups focusing on retail customers such as cell-phone users, telecommunications companies, and government and industrial clients.

Last month, Procter & Gamble initiated the broadest overhaul in its industry, transforming four business units based on geographic regions into seven global entities based on product lines like Baby Care or Food & Beverage. Every change is designed to get P&G closer to its customers and to provide products to the market more quickly. Reporting lines have been vastly simplified,

and executive compensation has been aligned with new goals.

Ford's reorganization is the only one with enough history to measure results. Development costs in 1997 were reduced by \$3 billion, and the first American/European-made all-wheel-drive car will soon be selling on both sides of the Atlantic. But Ford and other auto makers are now operating in a marketplace that has suddenly become much more treacherous, and they may have to take further steps. Even companies known for their global prowess, including ABB, with its entrepreneurial and global management team, and Royal Dutch/Shell Group, with its sophisticated global scenario planning, are having huge problems.

CHAOTIC WORLD. For them and others, planning is full of daunting uncertainties. No CEO could possibly know if Japan will take one year or 10 to recover or if and when massive infrastructure projects in emerging markets will come onstream or whether the growth of a global free market will be disrupted by currency controls, debt default, and protectionism.

In this chaotic international environment, companies will be forced to go beyond streamlining and a one-time structural overhaul. Toyota is an intriguing example. Like Ford, it has opted for standardizing models for efficient production and sales anywhere. But in reaction to the recent collapse of demand for cars in Asia, the Japanese auto maker is a retooling factories in the region so that each can not only serve local markets but can also export from those same bases to whatever countries are growing at the time. And instead of laying off workers, Toyota is training them.

Many of the strategies that may look like reaching at the end of 1998 will have to be just a prologue to continuous restructurings for the future. The premium will be on what Toyota is emphasizing: extreme flexibility, built-in contingency planning, and intensive focus on developing new skills for management and for the workforce. The winning plans will require more stretching than anything companies have attempted in their professional lives. The warning of Intel's Andy Grove that "only the paranoid survive" was never more apt. But fear alone won't be enough. Some bold risk-taking—more than we have generated thus far—will be essential.

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

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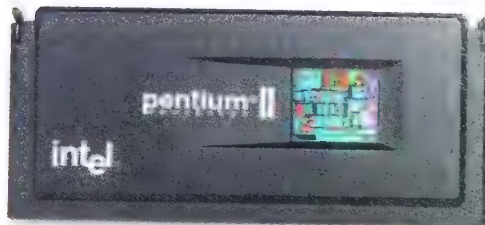


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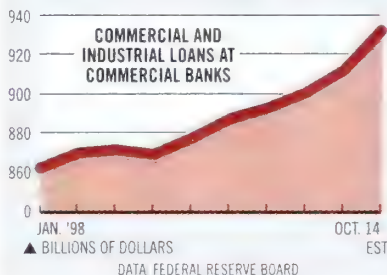
BY GENE KORETZ

A RECESSIONARY CREDIT CRUNCH?

Market fears seem exaggerated

There's no denying that U.S. financial markets have been undergoing something that looks like the start of a serious credit crunch. Spreads between yields on long-term investment-grade bonds and Treasuries have widened. Both the junk-bond and initial-public-offering markets have all but shut down. And issuance of higher quality corporate bonds has slowed sharply.

BANK LENDING IS PICKING UP STEAM



The critical question is whether the current situation is likely to lead to a recession. No, says economist Maury Harris of PaineWebber Inc. "What the markets are ignoring," he notes, "is that alternate sources of capital are filling the gap for most borrowers, that corporate and individual borrowers are in reasonably good health, and that lenders themselves are relatively strong."

While nearly all expansions are ultimately killed by a credit crunch, Harris points out that the current situation is unique in that market interest rates have generally been declining rather than rising, with the widening of most quality spreads resulting from an even sharper drop in Treasury rates. Only junk-bond rates have really risen.

Moreover, whereas past credit crunches usually involved a constriction of credit from banks, the banks are actually stepping up to the plate and providing substitute financing this time around. In August and September, for example, commercial banks' business loans jumped by \$20 billion, or a 14.3% annual rate, vs. an 8.4% pace in the first seven months of the year (chart).

Large corporations have also turned to the commercial-paper market. And while

issuance of domestic nonfinancial commercial paper surged at a 73% annual rate in recent months, commercial-paper rates have actually started to decline. Indeed, Harris notes, the \$20 billion increase in bank loans in July and August, plus a similar rise in outstanding nonfinancial commercial paper, have partly offset what he believes to be a temporary drop in bond-market financing.

With such credit sources helping to fill the gap for now, Harris thinks the markets will soon come to realize that the credit-worthiness of borrowers is much stronger than in earlier business cycles. Corporations have lower debt burdens than in the late 1980s, for example, and relatively low interest rates translate into far lower debt-servicing costs.

Commercial-real estate delinquencies and both home-mortgage and consumer-loan delinquency rates have also been declining. And with only a handful of money-center banks exposed to hedge fund woes, most U.S. banks are in far better shape than they were at the start of the last recession when they were still feeling the devastating impact of bad real estate loans.

DUBIOUS AID FOR THE DISABLED

A promising law may hurt, not help

The Americans With Disabilities Act has a disability of its own, says a study by Massachusetts Institute of Technology economists K. Daron Acemoglu and Joshua D. Angrist. Instead of enhancing the hiring of people with disabilities, as the act, which took effect in 1992, was intended to do, it seems to have actually reduced the employment of disabled people, the authors report.

Critics of the act have long charged that it may actually induce employers to avoid hiring the disabled. For one thing, the mandate for "reasonable accommodation" of disabled employees can require costly investment in such items as special elevators. For another, employers may fear that disabled employees will be prone to sue them over wages or dismissal. The law's defenders, on the other hand, have argued that its ban on discrimination in hiring—and the possibility of lawsuits if it is ignored—would discourage such a reaction.

Whatever the theoretical arguments, the economists report that their analysis of Census Bureau survey data from 1987 to 1996 indicates that the act's impact on employment of the disabled was neg-

ative. While men aged 21 to 58 work on average, 45 weeks a year, disabled men work less than half that. And between 1992 and 1993, the first full year which the act was in effect, there was sharp decline in weeks they worked, from 20 to 18, and smaller drops in the hours worked by older men and young women. While the negative impact faded in later years, it was still apparent.

Some experts argue that the drop in employment occurred not because of the disabilities act, but because disabled people found it increasingly attractive to receive disability or income-support payments through the Social Security system. But Angrist rejects that argument, noting that the Social Security program increase has been long and gradual, while the drop in employment of the disabled was sudden and sharp.

By Peter C.

OFFICE SPACE AT A ROYAL PRICE

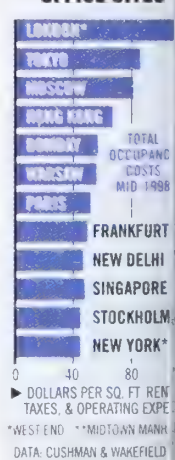
Rents in London and Europe surge

Investors in London's depressed commercial-real estate market earlier in the decade should be feeling like sweet-stakes winners. According to a recent Cushman & Wakefield survey, London has suddenly emerged as the world's priciest market for office space. Occupancy costs have surged by 20% to 30% since last December.

The survey indicates that Europe in general is enjoying its best commercial-real estate market in years. With Britain, France, Spain, and the Netherlands leading the way, prime office rents are up 6.2% over last year.

Meanwhile, recession and plunging currencies have taken a lot of the wind out of high-flying Asian real estate markets. Although occupancy costs in both Tokyo and Hong Kong are still relatively steep, they fell by 30% in dollar terms in the first six months of the year. And they plunged 33% and 43% in Bombay and Singapore, respectively.

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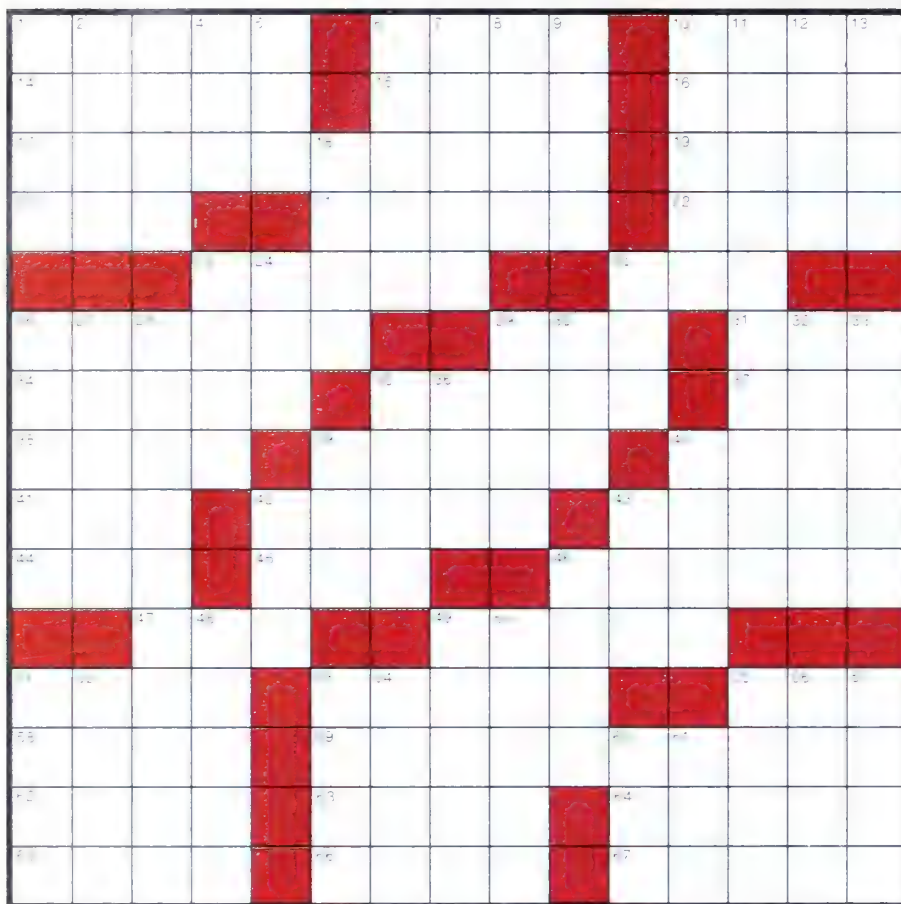
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Mixing Business with Pleasure by Lincoln

Puzzle #1



DOWN

- 1 "Que __?" ("What's happening?")
2. Sunbeam product
3. Foots the bill for
4. Flow away
5. Manhattan ingredient
6. French impressionist
7. Higher on the organization chart
8. Ballet bend
9. Deal in
10. Selling for 100, as a bond
11. Word used to describe the early '98 economy
12. Oldtime oath
13. Word in some company names
18. Big name at the Fed
23. Not working
24. Scale notes
25. Neil Simon's nickname
26. Distributes, as a memo
27. Parting word
28. Online investment advisor
29. Peeved mood
30. Presidential nickname
32. Mature
33. Junction points
35. Unruly groups
36. Enjoy Banff
39. Mediocre grade
40. Social slight
42. Driller's degree: Abbr.
43. Intermarket trader, for short
46. Nightclub number
48. What trainees are shown
49. American Greetings products
50. Adds to staff
51. Southeast Asian nation
52. Play __ ear (improvise)
53. Carnegie, by birth
54. Ralph Lauren brand
55. Mortgage, for instance
56. Prod
57. "60 Minutes" name
60. Dollar fractions: Abbr.
61. __ la la

ACROSS

1. Family-aircraft pioneer
6. Gene researchers' products
10. Long time
14. Mideast region, to poets
15. Competent
16. How some order lunch
17. 20% of a new alternative fuel
19. CFP's creation
20. Part of Q&A: Abbr.
21. Support __ (technical-analysis term)
22. Gets to the bottom line, in a way
23. Steamed
25. Financial-data co.
26. Campbell Soup's headquarters
29. __ Paulo, Brazil
31. Computer-linkage system
34. Buffett and Gates, to some
35. CNN rival
37. Type of "meter" on a dashboard
38. Solemn ceremony
39. TV reporter Roberts
40. Desert Storm missile
41. Animation frame
42. Ledger entry
43. Low joint
44. Be litigious
45. __ Moines
46. Fiduciary relationships
47. Fiscal periods: Abbr.
49. Insurer to the upscale
51. Inventory accounting convention: Abbr.
53. World's #1 investor in Latin
55. Airport near JFK
58. Surmounting
59. Bad news for bulls
62. Member of the orchestra
63. Ye __ Booke Shoppe
64. " __ luxuriously" (see page at right)
65. Word elements: Abbr.
66. Put in the trash
67. Citigroup co-chairman's nickname

For answers to this puzzle:

Turn to page 184 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.

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BY STEPHEN H. WILDSTROM

THE LAST DAYS OF THE HOME PC?

They're too complex for the job, and handier appliances are on the way

I recently bought a new home computer, and I feel it's well on its way to becoming obsolete. Not in the usual way of being superseded by PCs that are faster and cheaper. But in a more fundamental sense, the powerful but complex computers of today may be on their way out, at least in the home. Over time, they will be replaced by an assortment of simple devices, each specialized to perform one task.

This has been a dream of industry visionaries, but it's becoming reality because of two trends. First, PCs remain too intimidating for them to rise much beyond their current presence in about half of U.S. homes and far less in most countries. Second, the plunging prices of processors, displays, memory, and other key components are making cheap and simple—but powerful—devices practical. "The PC is too complicated," says Paul Horn, senior vice-president for research at IBM. "It will fragment into appliances."

These smart appliances have already begun to appear. The PalmPilot is the most popular of a range of handheld computers that manage your address book and calendar. The CrossPad is a digital clipboard that allows you to load into a computer what you write on ordinary paper. The electronic

books that I wrote about in my Nov. 2 column are another example. Several printers, including the new Lexmark 5770, can use the memory cards from digital cameras to print pictures directly.

The trouble is that today's "information appliances" still require a PC. Some, like the CrossPad, are useless without a computer to connect to. Others, like the Palm, fall far short of their potential when used alone. Hooking them up to a computer is not always a pleasant process.

The answer lies in connecting these devices not directly to a computer but to a network of some sort. By the end of the year, software and hardware should be available to turn your existing telephone wiring into an inexpensive Ethernet network of the sort currently used to link up PCs. Wireless links are even better. Intel is lead-

CONFUSING Consumers want something simple and easy to use, and the PC just isn't it

ing a consortium developing a radio technology called Bluetooth that would allow appliances to hook up to a network instantly as soon as they come within range of another Bluetooth device.

Once you have a network to connect your information appliances to each other and to the outside world, you probably no longer need that vexing PC on your desktop. You still need something to tie all those devices together, manage a connection to the

Internet, provide lots of room for file storage, and, if needed, do the heavy-duty computational work that cheap appliances can't handle. This is a description of a server, a powerful but hidden computer that has no need for a complex and trouble-prone graphic operating system. The PC "will become an information furnace in the basement, heating the bits for the house," says Neil Gershenfeld of the MIT Media Lab.

Of course, there's a big item missing from this picture. What will you use for Web browsing, word processing, E-mail, financial management, and the other prime

for homes at the time because almost no homes have networks, while the plunging cost of regular PCs causes most companies to lose interest. The consumer network computer may be an idea whose time is almost here.

If you think about it, a computer that tries to do everything is bound to be complicated. There's a reason why we don't see combination stove-dishwashers or refrigerator-washing machines. But PCs try to be their electronic equivalent, and modern Technology has made them all-purpose PCs cheap, but at a big cost in difficulty.

In the business world,



uses of home PCs today? The fact is that none of those functions require machines as powerful and complex as even the slowest computer now on the market. Apple Computer's simplified iMac is a step in the right direction, but it's still overpowered for the job. It's too expensive and depends on a general-purpose operating system.

A couple of years ago, there was much buzz about simplified network computers. These couldn't be designed

standard PCs will dominate for a long time to come, many consumers will want full-featured home computers. But most people want only a fraction of the functions available on the machines they now have. Wouldn't it be nice to type a letter and browse the Web without being told that you have performed an illegal operation? You may find that a world of computers that do less but do it much better is very appealing.

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LINDBERGH

By A. Scott Berg

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THE HERO WHO FELL TO EARTH

When A. Scott Berg began work on his biography of Charles A. Lindbergh 10 years ago, he could not have anticipated the murder trial of O.J. Simpson or the equally sensationalized death of Diana, Princess of Wales. But Berg is fortunate indeed that the O.J. and Princess Di media circuses preceded the publication of his book. For the resulting debate about the celebration of our culture makes newly relevant what would otherwise be a tired story of a fallen idol whose signal achievement came 71 years ago. *Lindbergh* is not without faults, but it is likely to stand as the definitive account of the paradoxical figure who was the world's first media megastar.

In 1927, Lindbergh lifted himself from obscurity to global celebrity by making the first nonstop flight from New York to Paris aboard his plane, the *Spirit of St. Louis*. The 25-year-old Minnesotan was hardly alone in braving the dangers of early air travel. Teams of pilots already had flown farther in multi-engine planes. What set Lindbergh, "The Lone Eagle," heroically apart was that he flew solo over a vast expanse of water: one pilot, one engine, zero margin for error. It did not hurt that Lindbergh was more mediagenic than most movie stars.

In Berg's view, Lindbergh was driven not by a desire for wealth or fame but a love of flying and a visionary belief in aviation's future. At first, the young aviator made uncommonly constructive use of the celebrity his daring flight afforded him. Deluged with dubious get-rich-quick offers, the shy, chaste Lindbergh rebuffed them all and played a seminal role in helping to establish the aviation industry, as an adviser to Pan American, TWA, and other fledgling airlines. He tested and helped design new planes and surveyed cross-country and transoceanic routes.

The doors that fame opened enabled Lindbergh to indulge his intellectual restlessness to surprisingly prophetic effect. Within a few years of landing in Paris, this college dropout was pondering the possibilities of space travel and sponsoring early research in rocketry. He pioneered the use of airplanes in archaeology and teamed with the French polymath Alexis Carrel to create a forerunner of the artificial heart.

Increasingly discomfited by the relentless intrusions of the press, Lindbergh was plunged neck-deep into celebrity's dark side in 1932, when his infant son was kidnapped and killed. Lindbergh took the stand to testify against Bruno Richard Hauptmann in what was hyped as the "Trial of the Century." The trial was every bit as publicity-addled as O.J. Simpson's, but to opposite effect: Hauptmann was convicted and executed. Despite doubts that linger to this day, Berg concludes that Hauptmann was indeed the kidnapper, citing "a veritable mountain of undisputed evidence."

The first writer granted full access to Lindbergh's archives and to the equally voluminous papers of his widow, 91-year-old Anne Morrow Lindbergh, Berg for the most part makes artful use of his treasure trove. Only occasionally does he lapse into travelogue mode—no small achievement in itself considering how peripatetic Lindbergh remained throughout his life—and Berg's richly detailed accounts of the flight of the *Spirit of St. Louis* and the equally harrowing search for "the Lindbergh baby" are riveting.

But the reader would have been better served if Berg had interrupted his

compelling narrative from time to time to allow for more trenchant analysis of his often confounding subject. It would have been helpful, for example, had the author not waited until page 192 to make a first, cursory stab at explaining why it was that Lindbergh showed absolutely no interest in the opposite sex until he was 27 years old. But the lightness of Berg's touch is especially problematic in his account of the aviator's behavior in the years leading up to America's entry into World War II.

Lindbergh was hardly alone in vehemently opposing U.S. entry into Europe's war, nor in underestimating Adolf Hitler's capacity for barbarity. But his many speeches and broadcasts, Lindbergh came across as altogether too admiring of German air power and too forgiving of Nazi aggression on the one hand, and essentially indifferent to the horrific plight of Europe's Jews on the other. He also complained that the leaders of "the Jewish race" were conspiring to push America into the war and declared that the "greatest danger" the Jews posed "lies in their large ownership and influence over our motion pictures, our press, our radio, and our government."

Berg is persuasive in arguing that the resulting vilification of Lindbergh as an Axis sympathizer and traitor went much too far. Indeed, when the Roosevelt Administration blocked attempts at enlisting in the

Air Force after the attack on Pearl Harbor, Lindbergh arranged a posting as an Air Force test pilot in the South Pacific, where he unofficially flew 50 combat missions. But the book suffers at the end from Berg's failure to confront Lindbergh's anti-Semitism head-on, or to explain why it was that he "buried his head in the sand when confronted with the crimes of inhumanity that expelled so many others." The impression one comes away with is that Lindbergh's views were rooted not in hatred but in ignorance and a lack of human empathy—that he was, in short, a celebrity hopelessly out of his depth.

BY ANTHONY BIANCO

Senior writer Bianco is the author of *The Reichmanns* (Times Books).



THE ACCOUNT SUFFERS FROM BERG'S FAILURE TO CONFRONT LINDBERGH'S ANTI-SEMITISM HEAD-ON

JAMES C. COOPER & KATHLEEN MADIGAN

WILL CONSUMERS SAVE THE DAY? KEEP YOUR FINGERS CROSSED

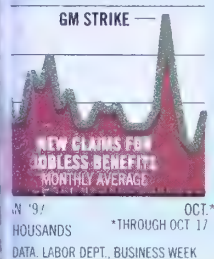
Confidence is dropping, but spending may stay healthy a while longer

U.S. ECONOMY

Household America has been riding high. Since early last year, consumer spending has grown more than at any time since the boom years of the early 1980s. In fact, households have accounted for more than twice the economic growth that capital spending has contributed. But as tighter financial conditions and weaker global demand hammer the business sector, the pressure is on households to keep on spending. If this 7½-year expansion of consumer spending, a recession will be difficult to avoid.

Will consumers save the day? So far, the pluses outweigh the minuses. But the negatives are growing. Households' confidence in the future plunged in October. But at the same time, consumers noted only small deterioration in their current situations, and weekly surveys of October retail activity suggest buying is brisk. True, layoff announcements are up, but weekly jobless claims in October did not show a sharp break from their recent trend (chart).

SHORT LINES AT THE EMPLOYMENT OFFICE



Although a credit squeeze is pinching Wall Street financing activity, banks seem more than willing to lend to households. Banks have tightened their lending standards, especially for some large companies, but bank credit is still flowing smoothly. And with the Federal Reserve cutting interest rates, which lowers banks' cost of funds, banks will keep competing for new borrowers, with obvious benefits for housing and rate-sensitive consumer goods. In fact, another wave of mortgage refinancing—even larger than the one earlier this year—is set to support outlays in coming months, helping in time for holiday shopping.

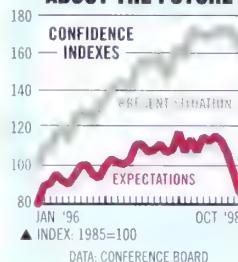
IT'S NO MISTAKE, consumer spending is going to stay healthy by some degree. That's because the two major forces that have propelled household outlays—strong labor markets and richly accommodative financial conditions—are both starting to wane. Increased wealth from stock-market gains and a decline in mortgage refinancing because of low interest rates have lifted both consumer spending and housing above levels that fundamentals would have suggested. So far this year, for instance, real consumer out-

lays have grown at an annual rate of 5.4%, but real income is up only 3.5%. And home sales hit records this summer, even though demographics could not justify such a high level of new housing.

Now, reality is setting in. Consumers are growing more concerned about their economic futures. The Conference Board's index of consumer confidence in October fell to the lowest level in nearly two years. The index has now declined for four consecutive months, and the slide in the past two months has been the steepest since the economy was struggling to recover from the recession in 1991.

In its report, the Board said that overall confidence remains lofty by historical standards, held up by a lower but still high assessment of present conditions. However, it noted that consumer expectations have deteriorated sharply, to levels typically associated with a sluggish economy (chart). The Board attributed the downbeat attitudes to financial-market turmoil, political concerns, and layoff announcements. The big worry: If confidence falls further in coming months, the holiday buying season may suffer immensely.

CONSUMERS ARE ANXIOUS ABOUT THE FUTURE



HOMEBUILDERS WILL ALSO FEEL the chill of a consumer slowdown. However, the pace of housing activity has been unsustainably high, so a drop-off in demand was likely even without the recent financial turmoil. After all, a record 66.8% of Americans already are homeowners. In addition, demographic trends mean that fewer adults are moving out of their parents' houses and going out on their own, so demand for new housing is slowing down.

That doesn't mean housing will collapse. But the sector is unlikely to add to economic growth as it did in the first half, when residential construction, although only 4% of the economy, accounted for 13.5% of the increase in real gross domestic product.

Already, the data are mixed, usually a sign that a sector has hit a turning point. Mortgage applications to buy a home, for example, skyrocketed by 41% from mid-August to the first week in October. Applications pulled back somewhat in the following two weeks but

remain high. However, the tally of actual home sales is slipping. Existing homes sold at an annual rate of 4.68 million in September, down 1.1% from the August rate, which was down from July's sales pace.

The surge in mortgage applications—as well as the still strong weekly reports from stores—point up one contradiction in the confidence survey. Consumers may say they're worried about the economy in general. But as long as most individuals are not worried about losing their own job, then overall spending does not suffer much. Keep in mind, though, that workers have not forgotten the early years of this expansion, when job jitters kept a tight rein on consumer spending. Any downturn in the labor markets could quickly cause consumers to table future buying plans.

THAT'S WHY THE BIGGEST RISK in the consumer outlook is not Wall Street's gyrations, per se. After all, most household investments are tied up in 401(k) plans, and most consumers are not retiring soon. The biggest risk is how Corporate America deals with its new challenges in the wake of the Street's turmoil.

Without a doubt, the tightening of domestic financial conditions since the summer is going to hit the corporate sector hard, even as global weakness is already weighing heavily, especially on manufacturers. As 1999 approaches, many businesses are looking at a combination of weak profits, costlier credit, and more ex-

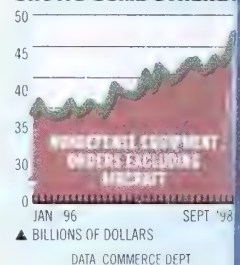
pensive equity financing, all on top of slower economic growth. Clearly, something has to give.

The first cuts on the list will most likely be capital spending, but not yet. A big part of the surprising strong 0.9% rise in overall durable-goods orders in September came from increased demand for capital equipment (chart). However, the fundamental support under business investment in new buildings and equipment are the poorest in many years. Facing lean 1999 budgets, many companies may be squeezing even drop out of their 1998 appropriations.

Moreover, at some point as demand slows, businesses will start to cut hiring, and household income growth will weaken at a time when the wealth effect is waning and the consumer saving rate is essentially zero. That will increase the incentive to save and decrease the urge to splurge.

The big question, of course, is: How much will Household America pull back? The best indicator of that will be the labor markets. So far, the job data don't suggest that businesses are lopping payrolls at an alarm rate. But if job growth slows to a standstill, consumers will be in no position to rescue this economy.

CAPITAL SPENDING STILL SHOWS SOME STRENGTH



SPAIN

PLAYING CATCH-UP IN THE RATE-CUTTING GAME

After a meeting in Austria, some European politicians called for lower interest rates to head off a global downturn. But Spain is already trying to get its rates down to the levels of those in Germany and France. So the Bank of Spain would likely resist even lower rates that could overheat Spain's solid economy.

Central banks in the new euro zone are converging their policy rates before the euro is introduced on Jan. 1, 1999. That's why the BOS cut its benchmark rate a half-percentage point, to 3.75% on Oct. 6. And the Bank of Italy chopped a full point off its rate, to 4%, on Oct. 26. Both rates remain above Germany's 3.3%.

The BOS has been trimming rates since January, 1997, making Spain a growth dynamo in Europe. Real gross domestic product grew 3.9% in the second quarter from a year ago, helped by strong domestic demand. And Spain will likely expand by 3.6% in 1999—the third-fastest growth rate in the 11-nation euro zone.

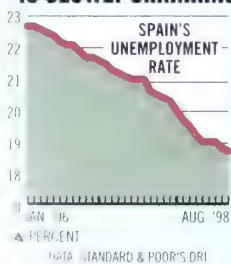
Although the fallout from Asia is slowing Spanish exports a bit, spending by businesses and consumers is fueling industrial activity. Industrial production increased 6.7% in the year ended in August. Output of consumer goods surged 8.9%, while capital goods were up 2.9%.

Moreover, the vibrant economy

is alleviating the nation's massive unemployment problem. Payroll growth is strongest in construction and tourist-related industries but even so, labor markets are extremely loose. The jobless rate slipped to a 6-year low in July, but it was still 18.7%, the highest in the euro zone (chart).

The BOS had been hesitant to cut interest rates faster because of fears that high inflation could reemerge. But the latest data argue against any such pickup. Falling commodity prices are beginning to lower costs of some retail goods. Consumer prices rose 0.1% in August, up only 1.6% from a year ago. That's below the BOS target rate of 2.1%, which is one reason why analysts now think the central bank will focus on lifting economic growth in 1999, instead of fighting inflation.

THE HIGH JOBLESS RATE IS SLOWLY SHRINKING



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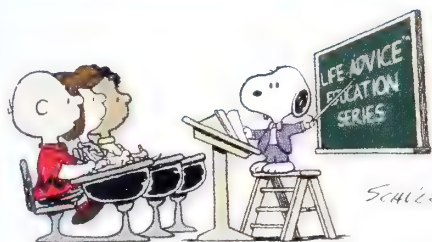


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THE ECONOMY

A BREAK IN THE CLOUDS

The markets are calmer, but the Fed's work is far from over

Are we out of the woods? Equity investors seem optimistic. The market for high-quality corporate debt is reviving. Even risk premiums on emerging-market debt have fallen a bit since the Federal Reserve cut interest rates for the second time in a month on Oct 15. Investors could almost be forgiven for thinking the worst of the market gridlock is behind us. All that talk of a liquidity crunch—maybe even the fears of an economic slowdown in the U.S.—suddenly seems almost passé.

But not quite. Even if Wall Street is shrugging off weak third-quarter earnings by major companies and focusing on pleasant upside surprises, the outlook

for the U.S. economy—which prompted the Fed's cuts—has really changed. And while the capital markets have stepped back from the brink of a liquidity crisis, the situation is far from normal. Nearly 150 companies that filed in June or earlier to make initial public offerings still haven't come to market, according to Securities Data Co. Risk premiums for bonds remain far above normal levels.

also worries that U.S. markets remain vulnerable to global problems. Brazil has come up with an economic reform package that may forestall devaluation across Latin America. But Japan's efforts to overhaul its banking system are still preliminary. And other banking hedge-fund disasters, à la Long-Term Capital Management, are possible.

The bottom line: Whatever the Do

Companies that used to count on public equity

And companies that used to count on public equity and debt are resorting to costlier bank financing.

All this has Fed Chairman Alan Greenspan watching carefully for signs that further cuts are needed. While the stock market has gotten a psychological boost from lower rates, he's concerned that U.S. credit markets are still distorted, with corporate borrowers forced to resort to costly bank financing. He

Jones industrial average may say, the U.S. economy is still likely to slow, even fall into a recession next year. Thanks to the capital-markets turn, "the cost of capital has gone up—that will make business a lot more cautious," says James Glassman, economist at Chase Securities Inc. Industrial production has already slowed, and companies are rethinking plans for capital spending. "A slowdown is already

BusinessWeek **ONLINE**

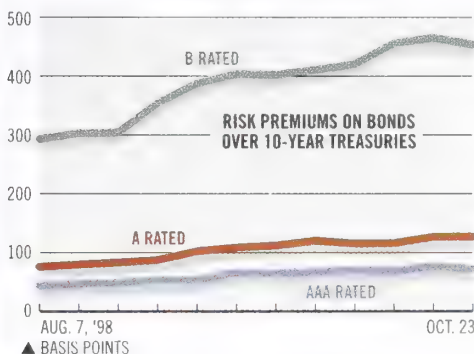
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GREENSPAN: STILL FRETTING ABOUT GLOBAL FALLOUT

THERE ARE SIGNS OF LIFE IN CAPITAL MARKETS...

- ▶ Big, established companies are successfully issuing stock. Conoco raised \$4.4 billion this month in the largest domestic initial public offering ever.
- ▶ Issuance of investment-grade bonds has begun to recover. Associates Corp. of North America sold \$4.8 billion in AA-rated bonds on Oct. 27.
- ▶ Liquidity is gradually increasing in the government bond market as investors lose their fear of more lightly traded instruments such as 28- and 29-year Treasury bonds.

...BUT BOND BUYERS REMAIN WARY



DATA: MORTGAGE BANKERS ASSN., FEDERAL RESERVE BOARD

Things are far worse at the market's low end. No junk bonds were issued in the two weeks ending Sept. 12, though a few were in late September, possibly because underwriters were trying to boost their quarterly standings, says Securities Data spokesman Richard Peterson. Issues in October—through the 27th—were about \$1 billion, vs. \$19 billion in April.

"GUN-SHY." The market for new equities isn't great, either. Oil company Conoco Inc. raised \$4.4 billion as it spun out of DuPont on Oct. 21. But only 10 IPOs have been filed in October, compared with 75 in March. "Everyone's kind of treading water," says Robert A. Maley, senior vice-president of Gilford Securities Inc., which is planning to underwrite an offering for 21st Century Holdings Co., a Plantation (Fla.) insurance company, in early November. "Institutional investors have had a tough go of it. They drive the market, and they're a little gun-shy."

The alternative for companies is the banks. Corporate borrowers who have spent the past 15 years weaning themselves from bank loans are showing up on their loan officers' doorsteps. And banks are willing to help them—for a price. For example, the up-front fees that lower-rated companies pay on loan syndications rose by as much as 233% in October, says the Loan Pricing Corp., which tracks the market. Says Arthur P. Davis, III, LPC president: "It is no longer a borrower's market."

This turn to bank lending leaves Fed officials with mixed emotions. While they're glad banks are lending, Fed officials fret the increased costs will crimp corporate budgets and slow capital spending, putting downward pressure on the economy.

What can the Fed do? Some analysts

able," says Allen Sinai, chief executive of Primark Decision Economics Inc. One ominous sign is the persistent malaise in capital markets. Consider a sign that Greenspan watches: the difference in yield between the most recently issued 30-year Treasury bond and "off-the-run" bond, or those issued months before. Typically, off-the-run bonds yield 5 basis points more

the corporate bond market. On Oct. 27, Associates Corp. of North America, the funding unit of Associates First Capital Corp., sold \$4.8 billion in bonds—the second-largest corporate debt deal ever. To get the issue sold, underwriters were willing to offer relatively high yields.

Across the markets, blue-chip borrowers are finding that investors want more: Ten-year notes issued by Chase

are turning to banks—a situation that worries the Fed

on new issues. But in the credit-market panic after Russia's default, that premium shot up to 34 basis points, as lenders refused to hold anything but the most liquid securities. The premium narrowed a bit, to 18 basis points. Greenspan figures the markets can't be deemed healthy until the off-the-run premium is back around the normal 5-basis point premium. The picture remains mixed, too, in

Manhattan Corp.—a benchmark for the financial-services industry—sold early this year at a yield 70 basis points over Treasuries. The issue plunged in early October as the market demanded a 230-basis-point spread. "[The yield] shot up like a child's fever," says Robert V. DiClemente, chief economist at Salomon Smith Barney. Even now, the Chase issue still yields 150 basis points above 10-year Treasuries.

say very little. Charles I. Clough Jr., chief investment strategist at Merrill Lynch & Co., says credit markets are contracting because there aren't enough worthy borrowers. "The problem is the incremental borrower is increasingly a defaulting borrower," says Clough. "It wouldn't matter if the fed funds rate was 5% or 4% or 3%, there will still be a slowdown in business investment."

But Greenspan disagrees. His con-

cern—and what prompted the second cut—is that worthy borrowers are losing access to capital. He and his Fed colleagues are ready to repeat the dose of medicine they administered in 1991, when a series of rate cuts broke a real credit crunch by slashing banks' costs of funds.

Even now, there's plenty of room to cut—and Wall Street is looking for more easing. The federal funds rate—what banks charge each other for overnight loans—now stands at 5%. That's still way above the rate for other short-term loans: Six-month Treasuries now yield just 4.16%. But this time, banks aren't

the problem—credit markets are. A getting investors to let down the guard could require a long campaign of lower rates to keep financial turmoil from pushing the U.S. into recession.

*By Gary Silverman and Peter Coy
New York, and Mike McNamee
Washington*

CREDIT CRUNCH? NOT ON MAIN STREET

By subway, Brooklyn's Independence Community Bank Corp. is one stop from Wall Street. But the \$5 billion savings and loan might as well be in another country. Across the river in Manhattan, there's turmoil in the capital markets where Corporate America raises cash. Investors are demanding steep premiums for any but the most risk-free investments, and companies are having trouble selling bonds and shares.

At Independence and at other banks across the country, however, the money is flowing. Indeed, it's going out so fast that some regulators worry about lax lending standards. What's happening at Independence shows why. The S&L, which specializes in loans on small apartment buildings, raised \$685 million in a public offering in March and is trying to produce a higher return on its capital. It doubled its mortgage lending to \$400 million in the third quarter, from \$200 million in the previous quarter, but still needs to find more business to satisfy its new investors. "It doesn't make any sense to raise \$685 million and have it earn low returns," says Chief Financial Officer John B. Zurell.

BACK TO THE FUTURE. Indeed, since Russia's bond default and its devastating aftermath cast a pall on capital markets, U.S. banks have been accelerating lending. In the three months ended Oct. 14, commercial and industrial lending by U.S. banks rose at an annualized rate of 17.4% to a record \$933 billion, the Federal Reserve says. Credit-card competition "has never been more intense," with teaser rates of 0% being offered, adds Robert B. McKinley, president of CardWeb Inc. And new mortgages should top \$1.4 trillion this year—a record, according to the Mortgage Bankers Assn.



And now, companies that hadn't gone to banks for years are queuing up at loan windows. "Banks are in a position to extend credit and, in fact, they are getting more business from companies that might in the past have raised funds in the markets," says Julie L. Williams, acting comptroller of the currency.

Bank borrowing, though, has its price. Corporations are having to pay higher rates and rework deals. Auto-

'92," during a credit crunch, says James B. Lee Jr., vice-chairman of Chase Manhattan Corp., which led the syndication. "We took a trip down memory lane."

Bankers also are lending freely to small businesses.

"There is absolutely no credit crunch for small and midsize companies," says David A. Daberkow, chief executive of National City Corp. in Cleveland. In Dodge City, Kan., Gibson's Discount Centers Inc.

emerged from bankruptcy on Sept. 24 with a \$25 million revolving credit line and a \$3 million term loan from BankBoston Corp.—at 0.75% above the prime rate. "We worked out a good deal," says Lynn Bellah, Gibson's chief financial officer.

DEALS GALORE. Competition for borrowers, in fact, remains tough. Michael Kowalski, CEO of TownBank in Mesquite, Tex., says he just cut a quarter-point off a 9.5% floating-rate loan to keep a customer in a commercial real estate deal who had been offered an 8% fixed rate. In Lake Success, N. Y., George L. Engelke Jr.,

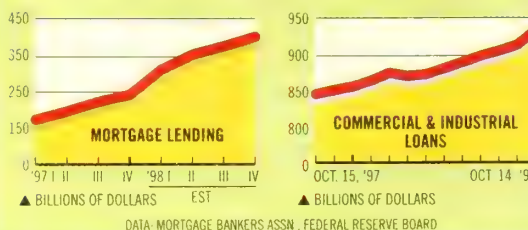
chairman of Astoria Financial Corp., says that, for the first time he can remember, rates for apartment-building loans are falling nearly to the level of single-family mortgages. "That doesn't make any sense at all," he says.

Such marketing

convinces Acting Comptroller Williams that she must continue her crusade against imprudent bank lending. That leaves regulators in a tricky position: To keep the economy growing, they want banks to lend, but just not too much.

*By Gary Silverman in New York
with bureau reports*

THE BANKS ARE BUSY



equipment maker SPX Corp. learned this firsthand in September, when it tried to raise \$1.65 billion to buy General Signal Corp., a maker of motors. At first, SPX planned to borrow from the banks and sell a bond. But it had to put off the bond sale and take on a bigger loan. "This is exactly how we did deals in '90, '91, and

By Michael J. Mandel

GETTING A FAST START ON THE SLOWDOWN

It's like watching a movie in fast-forward. The U.S. economy is still growing, but policymakers and corporations are acting as if a downturn has already begun. Despite an unemployment rate of 4.6%, the Federal Reserve has chopped interest rates twice this autumn. Meanwhile, businesses are cutting jobs with abandon: Through the first nine months of 1998, layoff announcements are running 53% ahead of last year's pace.

For the first time in memory, both businesses and the Fed are ahead of the curve going into a slowdown. In the past, when the economy started to sputter, it was much more typical for companies to stay optimistic and keep expanding. For example, in the 1990-91 recession, companies such as Aetna, Delta Air Lines, and Exaco were still adding workers well

into the recession before reversing course and undertaking massive layoffs and other cost-cutting efforts. Aetna's first layoffs did not take effect until February, 1991—one month before the recession ended.

ASIER HUNTING. Similarly, the Fed as in the past been more focused on fighting inflation than on heading off an incipient downturn. So, going back to the 1981-82 recession, the Fed was still boosting interest rates almost up to the moment that the downturn began. And in 1990, the Fed did not cut the discount rate—the mark of serious recession-fighting—until December of that year, six months after the recession started (see table).

But this time is different—and the new preemptive behavior, although unhelpful for laid-off workers, is almost certainly a good thing for the American economy. For businesses, it could mean that productivity and profits will stay in the plus range through a slowdown. By cutting rates earlier rather than later, the Federal Reserve should be able to keep the

economy moving despite the job cuts. And while losing a job is never enjoyable, workers will find it far easier to job-hunt in today's strong labor market, rather than at the bottom of a recession.

Why is everyone reacting more quickly this time? Consider Corporate America first. In part, executives are battenning down the hatches because they can see the turmoil from the Asian crisis worsening. But equally important, a decade of rapid changes has conditioned them to

Indeed, as the economy slows down, businesses are closing their most inefficient and technologically backward assembly lines—something that they were reluctant to do while demand stayed strong. Meanwhile, production is being transferred to companies' most advanced plants. One example: Belden Inc., a \$740 million maker of wires and cables, announced on Oct. 22 that it was cutting workers and closing down three older plants, while shifting production to a newer factory in South Carolina.

SHOCK HAZARD. The Federal Reserve has also developed faster reflexes. The best indication of this is the discount rate, which is the interest rate that the Fed charges banks for overnight borrowing.

In the past four major recessions, the Fed did not cut the discount rate until months after the downturn

started. Since monetary stimulus takes 12 to 18 months to produce results, those recessions were deeper and longer lasting than they needed to be.

But this time around, the Federal Reserve Board cut the discount rate on Oct. 15, well before any recession started. The reason? With inflation dormant, it was much easier for the Fed to take aggressive action. What's more, Alan Greenspan learned from his 1990 experience, when a reluctance to cut rates left the economy vulnerable to unexpected negative shocks—in that case, the Persian Gulf War.

Of course, it still may be possible that the Federal Reserve's interest-rate cuts are insufficient to balance out the combined negative effects of the job cuts and the global turmoil. The U.S. may still slip into recession. But at least this time, businesses and policymakers have their eyes wide open.

Mandel covers the New Economy for BUSINESS WEEK.



move faster in response to unexpected events and made layoffs part of the drill.

As a result, over the past six months manufacturing productivity, measured by industrial production, has actually been rising at a 2.9% annual rate as companies cut hours and employment fast enough to compensate for sluggish demand in many markets. By comparison, in the six months leading up to the 1990 recession, manufacturing productivity rose at only a 1.8% rate as companies kept their workers on the job despite a slowing economy.

The Fed's Rate Cut: Finally Ahead of the Curve?

RECESSION BEGINS	FIRST DISCOUNT-RATE CUT*
DECEMBER, 1969	11 MONTHS LATER
NOVEMBER, 1973	13 MONTHS LATER
JULY 1981	4 MONTHS LATER
JULY 1990	5 MONTHS LATER

*The Fed raised the discount rate prior to all four recessions
DATA: FEDERAL RESERVE BOARD

By Susan Garland

MICROSOFT: BIT BY BIT, THE FEDS ARE MAKING A CASE...

Prosecutors love smoking guns—ideally, in the hand of a suspect standing over the corpse. In antitrust cases, the equivalent is a hot internal document that lays out a conspiracy to squash competition. Alas, that rarely happens. So in the first two weeks of the Microsoft Corp. trial, the Justice Dept. did what prosecutors usually do in complex cases—try to build a portrait of illegality from bits of evidence.

So far, the government is off to a credible start, especially in trying to prove that the colossus of Redmond, Wash., tried to use its Windows operating-system monopoly to eliminate a threat from Netscape Communications Corp. The centerpiece: a meeting on June 21, 1995. Justice went a long way to establish—through the testimony of Netscape Chief Executive James L. Barksdale and laptop notes taken during the meeting by Netscape co-founder Marc L. Andreessen—that

Microsoft tried to persuade Netscape to divide up the fledgling Internet-browser market. Particularly incriminating are day-after notes from a Microsoft exec stating that a top priority of the meeting was to “establish Microsoft ownership” of Internet technologies for Windows.

To be sure, if Justice thought it had a slam-dunk market-allocation case, it could have brought criminal charges. But Justice lead prosecutor David Boies is not trying to prove collusion. Instead, he’s trying to show a pattern of anticompetitive behavior by a monopolist. As Washington antitrust attorney Mark C. Schechter points out, Justice need only use the



JUSTICE'S BOIES

Collusion isn't the issue; a pattern of anticompetitive behavior is

meeting to establish the idea that Microsoft saw Netscape as a potential threat to operating-system dominance. “The meeting is atmospheric,” Schechter says. “The government must prove that Microsoft took actions to reasonably exclude or impede Netscape.”

Here again, Justice already has offered compelling proof that Microsoft used its Windows dominance to try to cut off avenues of distribution for Netscape’s browser.

Handwritten notes from a senior official of Apple Computer Corp. document a Microsoft threat to draw its Apple version of Office

COMMENTARY

By Mike France

...HAH! YOU CALL A FEW MIFFED RIVALS A CASE?

Now that we’ve seen the first installment of the Justice Dept. case against Microsoft, what are we to think?

It’s early yet, but based upon the initial phase—a 127-page statement from Netscape Communications Corp. and 5 days of testimony by Netscape CEO James L. Barksdale—there’s good reason to question whether Justice can pull off more than a token victory. Why? Because in spite of the rivals happy to cite the misdeeds of Microsoft Corp.—and the dozens of embarrassing internal E-mail messages indirectly confirming Justice’s claims of anticompetitive tactics—the government’s nice, clean story line isn’t holding up.

Consider the allegations about the



MICROSOFT'S WARDEN

Microsoft has been able to muddy the government's nice, clean story line

key June, 1995, meeting between Microsoft and Netscape. Justice says Microsoft illegally proposed dividing the Internet-browser market and that Netscape rejected the offer. Antitrust scholars say that only once has the government successfully sued a company for making a collusion proposal the other party rejected. It was when Justice had a tape of ex-American Airlines chief Robert L. Crandall proposing a rate-fixing deal with Braniff.

This time, there’s no tape—just complaints from bitter rivals. And the harder you look at Justice’s evidence, the squishier it seems. Microsoft never directly proposed “dividing” the browser market, but only implied it. It

also seems that Microsoft’s alleged attempt to invest in Netscape—supposedly to keep Netscape from competing—may have been misrepresented. Netscape co-founder Clark initiated investment talks with Microsoft months before the offer.

Bottom line: The only direct proof of Justice’s version of events to emerge so far comes from Barksdale and Netscape co-founder Marc Andreessen—hardly disinterested parties. Judge Thomas Penfield Jackson is likely to want stronger evidence before throwing the book at Microsoft. Sure, there are a couple of suspicious internal E-mail messages, such as the one in which lieutenant of William H. Gates III stated that his goal in the infamous meeting was to “move [Netscape] out” of selling browsers for Windows. But it’s hardly enough to convict Microsoft.

The alleged market division isn’t the only part of the government case that looks weak. Microsoft’s legal team did a good job of refuting

WASHINGTON

PIGS-IN-A-BUDGET

The pork is staggering. Here are but a few highlights

After President Clinton and Congress approved an omnibus spending bill on Oct. 21, lawmakers griped that they had no idea what was contained in the bill's 3,825 pages. But one reason it got so big was the veritable picnic of special-interest provisions that were inserted in the final days of the session.

The treats, for everyone from Wall Street to cereal makers, are cloaked in obscure verbiage, but take a hefty bite out of the Treasury. Take a deal won by foreign affiliates of U.S. financial-services companies. A group including American Express, Citigroup, GE Capital, General Motors Acceptance, and Bankers Trust nailed down an indefinite deferral for income earned abroad next year by financial-services companies. Estimated cost to taxpayers: \$500 million to well over \$1 billion.

Before this fix, the firms owed taxes on overseas income as soon as it was earned, a provision designed in part to keep the companies from parking money in offshore havens. By contrast, manufacturing affiliates of U.S. companies owe taxes on operating income earned abroad only when repatriated to the U.S. Under the new law, financial-services firms will also be allowed to defer taxes until the money is brought back to the U.S.

PERMANENT BREAK? The tax break was largely the work of Representatives Amos Houghton (R-N.Y.) and Sander M. Levin (D-Mich.), who had penned it for a failed international tax bill. Undaunted, the two members of the tax-writing Ways & Means Committee attached it to the omnibus spending bill over the objections of the Treasury Dept. Financial-services companies, which get half their income abroad, hope to make the break permanent.

Another powerful business group, oil producers, got special treatment in the omnibus bill, courtesy of Senator Kay Bailey Hutchison (R-Tex.). On her second try, she attached a last-minute rider that gives the industry an eight-month reprieve from a new federal rule that would boost royalties on oil pumped from federal land. Projected savings: \$44 million in fees.

No matter, it seems, was too trivial to be excluded from the omnibus bill. Consider the raisins in Kellogg's Raisin Bran. Kellogg wants a waiver from regulations banning cereals that contain more than 6 grams of sugar per ounce from a federal nutrition program. If you count the sugar in the raisins, Raisin Bran exceeds the guidelines.



COME AND GET IT

Financial-service firms made out like bandits. Even Raisin Bran got a sweet deal

Kellogg recruited California raisin producers, who enlisted U.S. Representative Vic Fazio, to direct the National Academy of Sciences to spend \$300,000 studying this question: Should the sugar contained in the raisins be counted as sugar, or should the sugary fruit be set aside, just as many six-year-olds like to do?

Except for Washington's lobbyists, nobody seems particularly proud of the massive spending bill. But the lesson for Corporate America may be that money spent on lobbying will soon exceed the return on money invested in, say, research or new equipment. If it hasn't already.

By Paul Magnusson and Lorraine Woellert, with Paula Dwyer, in Washington

ware if the company carried e's browser instead of t's. On Oct. 28, David M. Colburn, president of America Online Inc., a browser distributor, testified that he chose Microsoft's browsing software because of its product because Microsoft offered to put AOL's software in it. He denied Microsoft's contention that AOL chose Microsoft because its technology was superior. "The value of the distribution through and promotion on the desktop was something we could not provide," he said. Colburn noted that because of deals with AOL and Apple—and Microsoft's decision to integrate its browser in Windows—only 10% of new computers are shipped with his browser. That's down from more than 50% when Microsoft took such actions. Colburn conceded that Microsoft was offering a better browser than it had, but the government is beginning to build a powerful case that monopoly is a better product, put Microsoft on a path to victory in the browser wars.

David M. Colburn is covering the Microsoft trial in Washington.

claims that the browser wars are over and that Netscape's dis-advantages were cut off. "You get a net effect on the market, and the fact that Netscape is still widely available] can huff and puff, but that has to be overcome," says New York trust attorney Stephen Axinn. If the government prevails, it will get a very strong remedy without a robust case, says George Mason University antitrust professor E. Kovacic. "Justice has to have confidence that Microsoft's behavior has been so unscrupulous that it merits a serious remedy. If they win by a slim margin on the last play of the game, it's not going to be enough." However, Justice still has other witnesses, Sun, and Intuit will testify. If the government backs up the case against these Microsoft rivals with evidence, it has an uphill struggle.

is BUSINESS WEEK's legal affairs reporter.

BusinessWeek COURT TV

BusinessWeek and Court TV post daily updates at businessweek.com and www.courtstv.com. Also, "Microsoft on Trial," Thursday at 7pm E.T. on Court TV.

SCANDALS

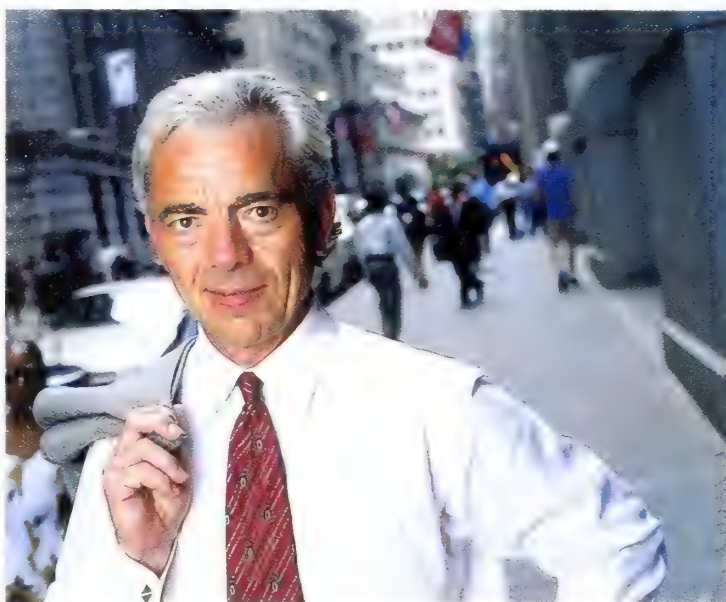
HOW CFS MADE BAD DEBTS PAY SO WELL

An anonymous letter lays out questionable practices

William R. Bartmann has always been one for dramatic gestures. When his company, Commercial Financial Services Inc., was riding high in 1997, the Tulsa entrepreneur flew more than 2,000 employees and guests to the Caribbean for a three-day celebration. Now that CFS appears to be unraveling, he is exiting with the same sense of drama.

On Oct. 27, Bartmann stunned a gathering of nearly 100 investor representatives by announcing he is temporarily stepping aside, in the wake of allegations of shaky financial dealings. The rest of his board—his wife, Kathryn, business partner Jay L. Jones, and independent director R. James Woolsey, in office less than a month—resigned. The sole remaining CFS director, Peter Wachtell, a new outsider, will determine if the 3,900-employee company is viable while he oversees a probe by outside lawyers and auditors.

PUZZLING SUCCESS. Bartmann's departure capped a week of turmoil for the company that pioneered the business of buying up bad credit-card debts and securitizing them. Since Oct. 21, Moody's, Standard & Poor's, Duff & Phelps Credit Rating, and Fitch IBCA have all suspended or cut ratings on CFS deals after receiving a letter alleging improprieties at CFS. The company has not missed any payments on its \$1.6 billion of deals outstanding, but Fitch says it expects CFS to



CEO BARTMANN says certain charges may have "some basis"

default on some notes. "Is this company potentially self-supporting or a Ponzi scheme?" says Stephen C. Macy, a vice-president at Moody's Investors Services.

The sudden plunge follows an equally breathtaking rise. Since he began securitizing consumer loans in 1995, Bartmann has leaped onto the *Forbes* 400 list, landed on the cover of *Inc.* magazine, and was among *BUSINESS WEEK*'s 1997 Entrepreneurs of the Year.

But rivals in the business always questioned how Bartmann could pay top dollar for charge-offs, or about 10¢ on the dollar, and collect the 30¢ or more he claims he can get. Mitchell J. Bonilla, vice-president of ContiAsset Receivables Management in San Diego, notes that banks typically collect 15¢ to 23¢ on the

dollar over three to five years on bad credit-card debt. "How can one organization claim to outperform the rest of the industry?" asks Bonilla.

Increasingly, investors fear, the answer may be fraud. In a letter dated Sept. 30, according to some of the rating agencies and CFS, an anonymous writer claimed CFS pumped up collections, selling nearly worthless receivables at inflated prices to a company with ties to CFS shareholders. Also, the writer suggested that Jones, Bartmann's business partner, was falsifying computer data to show more performing loans.

At first Bartmann denied the accusations. But on Oct. 20, he told investors "there appears to be some basis for certain of these allegations" about receivable sales. And at the Oct. 27 meeting, according to company and attendee accounts, Bartmann told investors Jones did have a relationship with DIMAT, the company purchasing the receivables, though he said he only learned of it on Oct. 19. Bartmann denied a connection to DIMAT himself

but revealed that he recently paid Jones \$50.8 million for CFS shares. Jones could not be reached for comment, and Bartmann's wife didn't return calls. Bartmann denies that he's done anything improper and says, "I do not believe anybody is lying. Now, it's a question of the investigation."

Bartmann's fall is sending shock waves through this fledgling industry, and CFS is looking for potential buyers or partners. Investors are moving cautiously—some dismantling CFS would only dry up collections. In the meantime, CFS employees had canceled a 50th-birthday celebration for Bartmann. "Somehow, it didn't seem like much fun," says W. Wayne Lear, director of CFS operations. Bartmann and investors would surely agree.

By Wendy Zellner in Dallas

THE RISE AND FALL OF COMMERCIAL FINANCIAL SERVICES

DATA: CFS, BUSINESS WEEK

1986 After Bill Bartmann's oil-field-pipe company goes bust, he, his wife, and a partner buy nonperforming Federal Deposit Insurance Corp. loans and make collection calls from their kitchen table. Commercial Financial Services is born.

MAY 1995 CFS becomes one of the first to securitize nonperforming consumer loans.

MARCH 1997 Bartmann takes 2,275 employees and guests on a Caribbean cruise.

NOVEMBER 1997 CFS forms international affiliate.

AUGUST 1998 CFS buys

Arkansas savings and loan.
OCTOBER Ratings agencies receive letter from anonymous source, alleging improper sales of receivables by CFS and falsification of data.
OCT. 27 Bartmann steps aside, pending completion of an investigation into CFS.



...s like Santa's not the only one staffing up. This holiday, *Fly Like an Eagle.*[™]



It's not exactly Santa's workshop, but we do have more than our usual share of busy, cheerful helpers on hand this time of year. Forty thousand more. All helping out with your cards and packages at all hours of the day and night. What joyful tidings.

 **UNITED STATES POSTAL SERVICE[®]**
www.usps.com

Major credit and debit cards accepted at most locations.

AIRLINES

CALIFORNIA, HERE WE COME (AGAIN)

American may make another try by buying Reno Air

California has hardly been the Golden State for American Airlines Inc. The foothold it gained with its 1987 purchase of low-fare carrier AirCal proved fleeting. And efforts to build a San Jose hub were abandoned in 1993 in the face of bruising competition, especially from Southwest Airlines Co.

American now appears ready to take another crack at the Coast. Sources close to the company say it is negotiating to buy seven-year-old Reno Air Inc., which has recently beefed up service to San Jose and Southern California. American is also trying to land a marketing partnership with Alaska Air Group Inc., now tied to Northwest Airlines Inc. With Reno and Alaska, American aims to boost significantly its market share from Vancouver to San Diego—by as much as 10% in California alone (chart). “They’ve been looking at a long-term strategy for reasserting themselves on the West Coast,” says one source close to American. American, Reno, and Alaska all decline to comment.

GLOBAL LINK. American scaled back on the West Coast in the early '90s when the airline industry was awash in red ink and excess capacity. Its intra-California share has fallen from 28% in 1990 to a paltry 1.1% last year. But these days, the carrier is posting record profits and boasting a hefty \$2.3 billion in cash—some of it earmarked for expansion. Buying Reno at an expected \$150 million, plus assumption of debt, would hardly put a dent in American's treasure chest. And such a deal could be much cheaper than introducing new flights into markets already served by Reno, United, and Southwest.

Why California? Sources close to the company say the move is part of a

grand strategy to build one of the world's strongest global networks, with the help of partners such as Cathay Pacific Airways and British Airways. The West Coast is a critical source of traffic and a desirable destination for alliance partners worldwide, as well as a crucial feeder market for Asian routes.

American has become increasingly wary of the rapid expansion by rival United Airlines Inc. and its no-frills Shuttle by United operations on the West Coast. By capturing intra-California travelers with the Shuttle, United is more likely to keep lucrative frequent fliers in the fold for longer trips,

the West Coast now because they have such a head start.”

American has a lot of catching up to do. For the past five years, it has maintained a frequent-flyer program linking Reno, and about 20% of Reno passengers are in the American program. Reno also leases airport facilities, buys ground-handling services from American. But because of restrictions in American's pilot contract, the airlines can't code-share, a system under which airline partners put their codes on one another's flights in computer reservation systems to improve bookings.

If American buys Reno, it will gain a carrier that has dramatically improved service and efficiency this year. Under new Chief Executive Officer Joseph O'Gorman, a former United executive, Reno has restructured to focus on profitable business traffic from San Jose and Southern California while cutting leisure flying to hubs in Reno and Vegas. The carrier, which lost \$12.3 million last year, turned a record \$9.4 million operating profit in the third quarter and has vastly improved its on-time performance. Still, rivals United and Southwest argue that Reno, with only 15 planes, won't alter the balance of power in California.

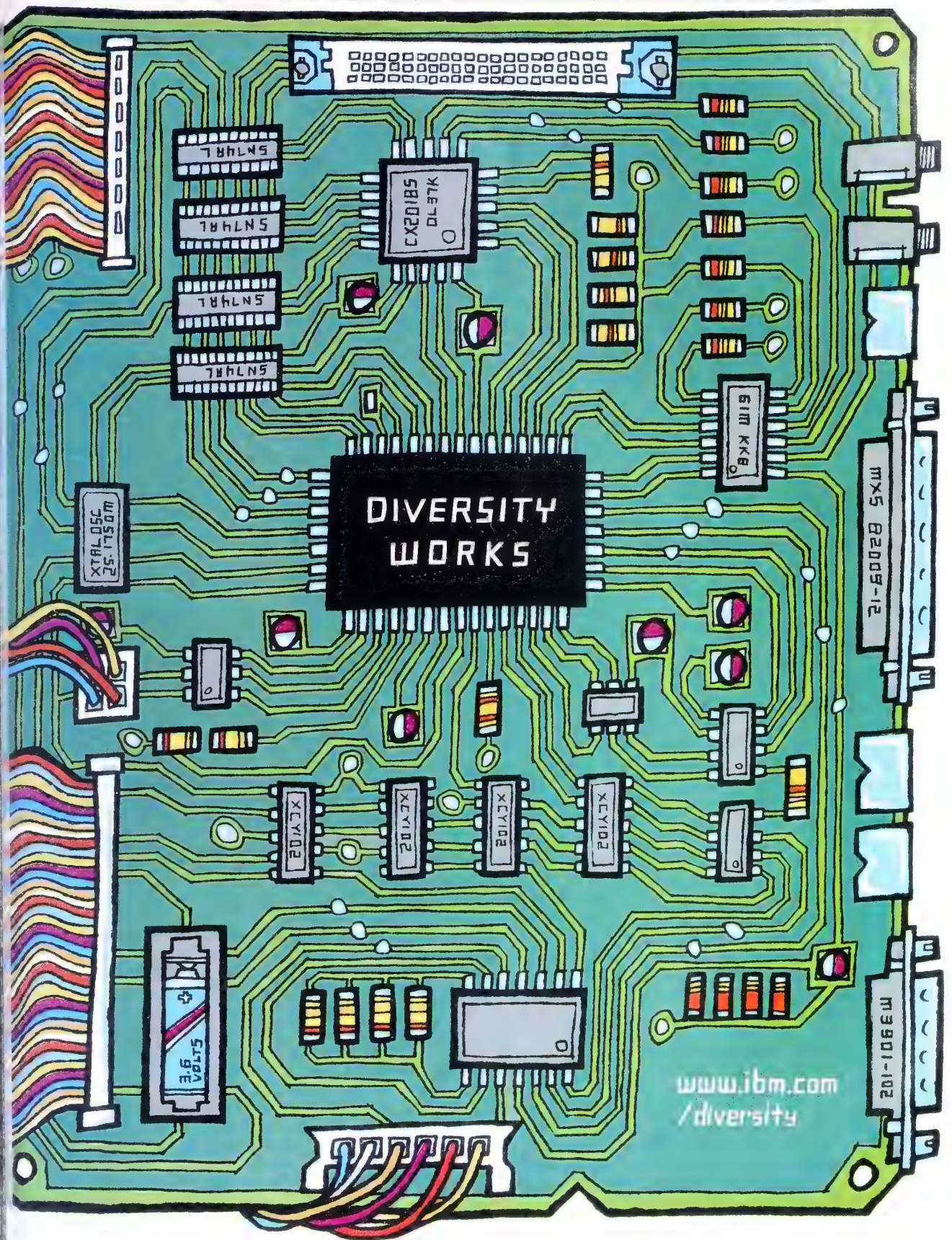
For Reno, however, adoption by American could mean the best chance of surviving the next economic downturn. “Reno in its current form has a limited life,” says Reno investor Cameron Burr of aviation investment firm Burr Group in Ridgefield, Conn. “They're sitting out there with no clear, defendable niche.” At least with American, the niche might get bigger.

By Wendy Zellner in Dallas, and David Leonhardt in Chicago

AMERICAN IS SMALL FRY IN THE CALIFORNIA MARKET



too. United “sensed we were vulnerable and would just let them have all these markets,” says one American insider. Last year, United grabbed about 28% of the intra-California market, second to Southwest's 49.5%. In September, the Shuttle invaded San Jose with eight daily round-trips to Los Angeles. Says analyst Brian D. Harris at Salomon Smith Barney: “It's going to be very difficult to take on United on



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MARKETING

GOT MILKED?

After a \$385 million campaign, sales are declining

Those cute milk-mustache ads are causing a nasty food fight. After a two-year audit, the Agriculture Dept. has declared that the dairy industry's campaign to promote milk consumption has "serious problems" and has been badly mismanaged. The audit recommends suspending the dairy group running the program because of sloppy record-keeping, overpayments to the program's administrator, and awarding of contracts to groups with ties to the campaign.

But there's an even bigger problem: During the course of the four-year-old campaign by the International Dairy Foods Assn. (IDFA), which will have spent \$385 million by next June, milk sales have declined—at an accelerated pace. U.S. per capita consumption has fallen almost 4.8% since 1994, says the USDA, vs. a 3.5% decline in the four years before the campaign started. "If any government agency was run like this," says Senator Patrick Leahy (D-Vt.), "Congress would call them before it and ask what the heck they're doing."

Why is the government involved? Under a 1985 law, food-commodity suppliers can require all companies in their industry to kick in to a promotional campaign. Agriculture ensures compliance and oversees the program.

But the milk campaign's executive director, Kurt Graetzer, calls Agriculture's

report "an outrageous hatchet job." IDFA, he says, has fixed some of the problems by hiring a full-time director and producing formal progress reports. The other criticisms, Graetzer says, "are nitpick procedural issues." He concedes that some record-keeping was weak but says no money went where it should not have.

Leahy has jumped on the bandwagon, Graetzer says, to make the IDFA look bad—because it opposes price floors that Leahy and Vermont farmers want.

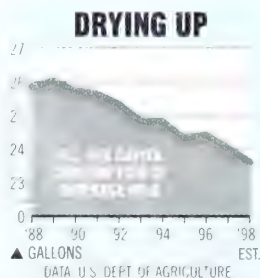
An Agriculture spokeswoman said the inspector general would let the audit speak for itself. Leahy says he criticized the campaign only after seeing the report.

The milk campaign has certainly been a grabber. About 100 celebrities, from President Clinton to the cast of *Frasier*, have donned the mustache. But Americans have continued to cut back on dairy to reduce fat intake—or make room for more soda. With bad weather producing high milk prices in both 1996 and 1998, Graetzer says consumption would have fallen even faster without the ads.

Perhaps—but it's also clear that campaign organizers have tried to twist the numbers to trumpet the program. "After a 30-year decline, milk consumption is trending up," Jay Schulberg, chief creative officer of Bozell Worldwide—the New York agency that designed the spots—said in a newspaper interview this summer. The agency says Schulberg was referring to total, not per capita, consumption—but even that has fallen in the past four years. And the USDA went so far as to tell Congress annual sales were 5.9% higher than they would have been without the milk ads.

The USDA has until Nov. 22 to respond. Enrique E. Figueroa, administrator of the branch overseeing the campaign, says it may ask for more changes but won't fire the IDFA. And the IDFA says it's confident milk processors will vote next month to extend the almost 2¢-a-gallon fee to fund the campaign. So they're not going to cry over you-know-what.

By David Leonhardt
in Chicago



LABOR

LESS EXPRESS FOR CHRISTMAS?

FedEx pilots may strike if their pay demands aren't met

Is FedEx about to get whacked by the same labor woes that grounded rival United Parcel Service Inc. last year? On Nov. 9, FedEx' pilot union threatening a work slowdown that could dent the company's ability to deliver its daily load of three million packages. The FedEx Pilots Assn. (FPA) has also asked its 3,500 members for the authority to mount a full-fledged walkout. If approved, the strike would kick off just as the busy holiday season gets under way at Thanksgiving.

The dispute is over money. FedEx unit of FDX Corp., is now offering 1% over four years to pilots, who earn an average \$130,000 a year. The pilots want



CUSHION? FedEx says it has backup plans, if pilots stop working overtime

24% in three years, similar to what UPS workers won last year. The FPA asks members to stop working overtime on Nov. 9 if FedEx does not agree. "We step up the pressure until we get a good contract," says FPA Vice-President Byron L. Cobb.

Tough talk, but it's unclear where the pilots' group can carry out its threats. A predecessor union tried similar tactics in 1995, but pilots balked at attacking the company. Still, that's before the UPS pilots pulled so far ahead. And many FedEx pilots are also used to arms over an inflexible computer scheduling system inaugurated last summer.

FedEx management, meanwhile, says it has backup plans if pilots refuse to work overtime. By shipping on other carriers and using pilot



moving performance.

 Muskets fire. Students battle for their lives at the barricades. And the world spins as the stage turns to reveal new perspectives on the action.  Scenic Technologies helps Broadway hits like Les Misérables enthrall theatergoers with spectacle as well as sound.  And from hovering helicopters in Miss Saigon to crashing chandeliers in The Phantom of the Opera, it's Rockwell automation that moves the scenery as well as the audience.  Just as Rockwell solutions help many other businesses get top billing in their industries.  Whether it's the automation systems that control every aspect of a car factory.  The call center technology that lets an order department handle hundreds of thousands of requests a day.  Or the avionics that help nearly every major airline navigate and communicate.  Dramatic answers for companies in motion.  Because whatever your business, the bottom line is this.  *You succeed. We succeed.SM*

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reserve status, FedEx Vice-President for Regulatory Affairs Rush O'Keefe says that a slowdown "will not have any consequential effect on our operations."

Still, the union already has caused some disarray. Days after its strike threat, Gilbert D. Mook, the senior vice-president for air operations and the executive in charge of labor relations, suddenly announced his plans to leave. FedEx says that he resigned and declines to comment on why.

More important, the union's demands put FedEx in a bind. The \$13 billion company could afford to give in, since pilots account for less than 10% of the company's \$5.8 billion total labor bill, estimates Donaldson, Lufkin & Jenrette Inc. analyst Paul R. Schlesinger. But a fat contract could encourage FedEx' other 128,000 U.S. employees to join unions, he says. Stiff competition and rising costs are adding pressure, too: FedEx' operating margins are an anemic 6%, compared with around 9% for UPS.

"CONTINGENCY PLANS." Competitors are watching to see if a Federal Express strike will give them an opening. "We're monitoring the situation on a daily basis," says David Fonkalsrud, marketing manager at DHL Worldwide Express. When UPS went out in 1997, the U.S. Postal Service had 2,700 temporary workers lined up and boosted its express mail business by 70%. This time, "the Post Office has contingency plans in place and we aren't taking it lightly," says a spokeswoman.

FedEx' ability to cope with a slowdown is difficult to judge. It can tap several hundred pilots who are in training to upgrade their skills, plus up to 15% more who are on standby. However, that might not be enough if most pilots refuse to fly overtime, which the FPA claims accounts for up to 30% of daily flights. O'Keefe insists that the figure is really only about 5%.

FedEx may be able to head off a strike in the courts. Under federal law, airline workers must undergo a 30-day "cooling off" period before striking. However, the FPA's predecessor already sat through the 30 days in 1985, without going on strike, and federal labor officials have told FPA lawyers that it's free to strike now, the union says. But this is an unusual situation, which O'Keefe says FedEx may challenge in court. The bottom line: Waiting for the last minute to do Christmas shopping may not be such a good idea this year.

By Aaron Bernstein in Washington and Dean Foust in Atlanta

COMPUTERS

2000 REASONS TO CELEBRATE

For lawyers, the Millennium Bug is a godsend

On Oct. 23, the law firm of Covington & Burling handed out "doom clocks" at a Year 2000 legal seminar in Washington, D.C. The souvenirs count off the seconds and minutes to the potential chaos that could occur at midnight Jan. 1, 2000, if computers aren't inoculated against the so-called millennium, or Y2K, bug. To lawyers, those



clocks might as well be counting billable hours: Y2K is well on its way to becoming the next litigation bonanza.

The millennium is still more than 400 days away, but a score of lawsuits have already been filed over alleged related losses. Among the targets: some top high-tech companies and consulting firms, including Andersen Consulting and Symantec Corp. Intuit Inc. faces six class actions, including by customers who demand millions in Y2K upgrades of its popular Quicken software.

And lawyers are lining up to cash in on what Gartner Group, a Stamford (Conn.) technology analyst, figures could

be hundreds of millions in legal fees. So far, the pioneers in the new legal frontier include the law firms of Mberg, Weiss, Bershad, Hynes & Lera in Silicon Valley; LeBoeuf, Lane, Greene & MacRae in New York; and Covington & Burling in Washington. The American Bar Assn. predicts hundreds more lawyers could be needed to handle the volume. Says Vito Peraino, Y2K attorney at Hancock Rothert & Sunshoft in San Francisco: "On the one hand, everyone is either a potential plaintiff or a potential target—or both."

How so? Whenever a date-dependent system messes up because it hasn't been programmed to recognize dates after Dec. 31, 1999, somebody becomes a target. Take software maker Tec-America Corp., whose software products do not recognize credit cards expiring in 2000. In September, Tec-America and American Cash Register, which uses Tec's software, settled a case filed by a suburban Detroit fruit and vegetable store for \$250,000.

FLOODGATES. Small potatoes? Maybe. But Andersen Consulting is moving to preempt what could be a flood of mass suits. Former client J. Baker Inc., a Canton (Mass.) clothing retailer, is demanding that Andersen pay for the debugging of a J. Baker system it designed nearly 10 years ago. Andersen has asked a Massachusetts Superior Court to rule, even before a suit is filed, whether J. Baker has grounds to sue. Says Kazim Isfahan, a Y2K analyst at Cambridge (Mass.)-based Giga Information Group Inc.: "If the floodgates will open to score new Y2K lawsuits."

The Y2K litigation has Washington's attention. In September, Congress passed a bill that gives limited liability protection if companies overstate their readiness for 2000.

The Justice Dept. is offering immunity from antitrust action if companies collaborate on Y2K problems. "We're trying to keep people focused on fixing the problem so liability cases won't be necessary later," says John Koskinen, Federal Clinton's Y2K crisis manager. Congress is also considering national standards and special arbitration boards and a federal court to handle Y2K litigation. "Y2K suits could clog courts throughout the country," warns H. Bieron, legislative assistant to Representative David Dreier (R-Calif.). The Y2K Bug strikes again—maybe.

By Marcia Stepanek in New York



**THEY ARE ALREADY AMONG US.
THEY ARE MORE ADVANCED.
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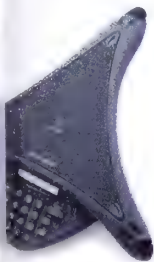
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EDITED BY KELLEY HOLLAND

BRAZIL FINALLY BITES THE BULLET

ON OCT. 27, BRAZIL PRESIDENT Fernando Henrique Cardoso finally swallowed some bitter medicine, announcing plans to slash \$23.5 billion from a \$60 billion fiscal deficit through spending cuts and tax hikes. Although he put off the actions until after the Congressional elections on Oct. 25, Cardoso must still ram the tough package through an unruly Congress lest global investors lose their patience. After approval, the way will be paved for an expected \$30 billion aid package led by the International Monetary Fund. It comes none too soon: After elation over the bailout offer that emerged from the IMF meeting in September, in-

vestors have turned wary, pushing down the Brazilian stock market and currency.

AN END AT LANDS' END

THE TERRA FIRMA WAS A little softer under his feet than he thought. Earlier this month, Michael Smith, the 38-year-old CEO of catalog retailer Lands' End, asserted he had the confidence of company founder and majority owner Gary Comer. But resignations happen. Smith turned his in Oct. 28 to make room for David Dyer, who left in 1994 to go to Home Shopping Network after serving as merchandising head. The shift is being made to bolster the company, which like other catalog retailers, has hit hard times this year. Its stock slipped from a 52-week high of just over \$44 to as low as \$15 in the past two months.

CLOSING BELL

GOING, GOING...

Is an online garage sale worth \$3.3 billion? Investors in eBay, whose Web site auctions off everything from Beanie Babies to antique dishes, think so. In just two days, Oct. 26 and 27, its stock soared 65%, to 82%, fueled by a buy recommendation from Donaldson, Lufkin & Jenrette, which estimates a \$180 billion world market for used merchandise. But eBay has that rare commodity among Net startups—profits. On Oct. 27, it said it earned 2¢ a share, more than double its year-before earnings.



WILL WINDOWS 2000 BE PROPHETIC?

WINDOWS NT 5.0 BY ANY other name will be just as late—but that doesn't seem to worry Microsoft. On Oct. 27, the company rolled out a new moniker for the NT operating system, originally expected this year: Windows 2000. Vice-President Brad Chase vows that the long-awaited operating system upgrade will ship in 1999. But he says a special, high-performance version to be called Datacenter Server will arrive up to three months later than the rest. This version represents Microsoft's first concerted effort to do the kind of data processing jobs in corporations that are now handled by mainframes.

A FAT DEAL FOR SUPERTHIN DISPLAYS

CANDESCENT TECHNOLOGIES, a Silicon Valley startup that

HEADLINER: ALEX MANDL

LOCAL-CALL HERO?

Former AT&T President Alex Mandl is back in the spotlight—this time as a local-phone warrior. Now CEO of Vienna (Va.)-based startup Teligent, Mandl unveiled plans on Oct. 27 to take on the Baby Bells by offering cheaper local service using new wireless technology. Teligent began service in 10 major U.S. markets and will expand to five more by yearend.

Targeting small and medium-sized businesses, Teligent intends to pocket a healthy profit even after giving customers a 30% discount. How? Using so-called fixed-wireless technology,

Teligent will transmit both phone and Internet traffic to radio receivers mounted on customers' buildings.

Since the company doesn't have to tear up the streets to lay a fiber, these systems can be far cheaper to build than wired networks. Mandl is convinced that the only way to attack the Bell is with a rival network. "Unless we are facilities-based, the local environment is not a viable business," he says. Goldman Sachs analyst Ken Hoexter expects Teligent to break even on a cash-flow basis as early as 2001.



By Catherine Yan

went seven years without an IPO, just nailed down a \$100 million investment from Sony, say insiders close to the companies. Candescant, started in 1991 to build flat-panel displays for electronic devices, is expected to ink the two-year deal on Nov. 2 to co-develop superthin displays for PCs to replace today's clunky monitors. Still, Candescant, which needs \$150 million more to gear up for high-volume production, finally plans its first IPO, in the first half of next year. "I'm thinking more toward the end of the half," says CEO Harry Marshall, noting today's slow IPO market.

NETTING ONLINE TIPSTERS

THINK TWICE BEFORE ACTING on a hot stock tip from some Internet chat room. In a nationwide sweep, the Securities & Exchange Commission charged 44 people and com-

panies with fraudulently promoting stocks over the Net. Although these self-proclaimed analysts claimed to have no connections with the companies they were touting, the SEC charged that the defendants had received more than \$6.3 million and nearly 10 million shares of cheap insider stock and options. In several instances, the SEC alleges the accused sold stock or exercised options immediately after advising online investors to buy the stocks.

ET CETERA...

- On Oct. 21, Kmart said it was looking for a grocery-store chain to merge with.
- Bell Atlantic's retiring CEO Raymond Smith, will leave Rothschild North America.
- On Oct. 23, Justice filed suit to block the Northwest Continental alliance.
- CBS CEO Michael Jordan is stepping aside to make room for Mel Karmazin.

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EDITED BY OWEN ULLMANN

BUGGING ON K STREET: THE GOP ASSAULT ON BUSINESS LOBBYISTS

In the eve of a crucial election, you'd expect Republicans to be working Gucci-to-Gucci with business lobbyists to ensure solid gains on Capitol Hill. Instead, GOP leaders are locked in a blood feud with the kings of K Street. Their fault: Too many business lobbyists are Democrats whose donations fatten the coffers of the opposition.

Republicans are incensed that after four years in power and two more all but assured—they're not getting proper respect. But business, mindful of the paltry gains it won in the 105th Congress, figures it needs Democratic votes.

Business lobbyists are furious over what some see as intimidation by Republicans. "They're trying to decide who we should hire and how much we should spend our money," fumes a GOP lobbyist. "It's outrageous."

The mutual animosity, which has been building for two years, is a bad omen for the next Congress. Unless business and Hill leaders patch things up, legislative victories on business goals such as tort reform, union overhaul, and trade liberalization will remain out of reach.

The latest eruption: a decision by the Electronic Industries Alliance to hire former Oklahoma Democratic Representative Dave McCurdy as its president. The move—coming soon after homebuilders and the aerospace industry named Democrats to head their trade groups—the last straw for Hill Republicans. Grouches a high-level aide: "Democrats get the top jobs; our guys get to be caddies." In mid-October, House Majority Whip Tom DeLay (R-Tex.) and some cohorts brazenly tried to pressure the EIA to drop McCurdy by holding up a bill that could benefit the group. But the EIA stood its ground, and the bill passed. The GOP's quarrel with K Street is about money as well as principle: Republican lobbyists will steer dough to the GOP. That's why Republicans are circulating a list of top lobbying

firms, with a breakdown of their donations. The not-too-subtle point: You'll have to pay to play in the 106th Congress.

In fact, Democrats continue to do surprisingly well in raising money among the hired guns. According to the nonpartisan Center for Responsive Politics, the five biggest Washington lobbying firms have given Dems 58% of a total of \$1.9 million in campaign cash for this election (table). The center also found that while business political action committees give most of their money to Republicans, Democrats are narrowing the gap. In the 18 months ended June 30, Dems snagged 37% of business PAC giving, up from 30% for all of Campaign '96.

WRONG WAY. Republicans may be livid, but they're ignoring reality. K Street firms are big Dem donors because they're packed with Democrats—a reflection of who ruled for 40 years before the 1994 Republican Revolution. Many firms are hiring more Republicans. That will accelerate if the GOP solidifies its control. But strong-arm tactics by DeLay & Co. will only backfire. Says one irate GOP lobbyist: "No firm worth its salt

WHOSE SIDE ARE THEY ON?

TOP FIVE WASHINGTON LOBBYING FIRMS	TOTAL 1998 GIVING*	DEMOCRATS	REPUBLICANS
VERNER LIIPFERT	\$582,000	62%	38%
CASSIDY & ASSOCIATES	249,000	60	40
PATTON BOGGS	153,000	73	27
AKIN GUMP	674,000	53	47
PRESTON GATES	226,000	44	55

*As of Oct. 1 Federal Election Commission reports
DATA: CENTER FOR RESPONSIVE POLITICS

will be browbeaten into firing Democrats on its staff."

Intimidation won't turn off the business money tap to Democrats, either. With religious conservatives and populists holding sway, business can no longer count on the GOP to pass its agenda without support from centrist Democrats. "The business community doesn't feel any great debt to Republican leaders in the House," says Charles S. Mack, outgoing president of the Business-Industry Political Action Committee.

Picking a fight with K Street may pry loose a bit more dough for Republicans in the final Election Day push. But the price could be steep: another deep fissure in the once-bedrock partnership between the GOP and Big Business.

By Amy Borrus

CAPITAL WRAPUP

OS LAUNCH CAMPAIGN 2000

Managed-care providers, which asked HMO regulation this fall, are already plotting to shape the health-care debate in 2000. The American Association of Health Plans will soon launch a \$1 million media offensive in early Presidential-contest states Iowa, New Hampshire. Its message: A government-knows-best approach will protect workers and small-business owners. "We want to change the self-managed-care climate," says AHP chief Karen M. Ignagni.

TAKE OUR MONEY... PLEASE

► Congressional Republicans are throwing more money at the military than it can spend. Take ballistic missile defense programs, which lawmakers want to accelerate. The Administration requested \$3.6 billion, and the Pentagon said it could use \$4.1 billion. But Congress ponied up \$4.6 billion for fiscal '99—with extra dough for simulation and other ways to reduce test failures. But the Pentagon can't speed up development because of already tight testing schedules.

A TAX-FREE PBS?

► House telecommunications subcommittee Chairman W.J. "Billy" Tauzin (R-La.) is making a new bid to end taxpayer support for the Public Broadcasting Service. PBS now gets an annual subsidy of \$325 million, but Tauzin wants Congress to replace that with a \$4 billion to \$5 billion trust fund for PBS financed by commercial broadcasters. The incentive for broadcasters: They wouldn't have to provide any public-service programming, as required by law.

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The economy is in meltdown. And the President is getting sicker

The contrast could not have been more vivid: As doctors ordered Russia's ailing President Boris Yeltsin to cancel visits to Malaysia and Europe, Moscow's energetic Mayor Yuri Luzhkov, 62, donned his track suit and strapped on in-line skates. With a blue bandanna tied around his bald head, Luzhkov led a crowd of children on a skating tour of the city's new sports complex. Meanwhile, 1,875 miles away, in the Siberian city of Krasnoyarsk, the swaggering, 48-year-old retired General Alexander Lebed—now governor of the surrounding province—boldly grabbed control of an anti-Yeltsin protest by jumping to the front of the crowd of 8,000 demonstrators.

Russians will be witnessing many more such antics in the next few months. Although elections aren't scheduled to be held until 2000, Yeltsin's deteriorating health seems ever more likely to compel him to resign early, possibly by yearend. If that happens, according to Russia's constitution, Prime Minister Yevgeny Primakov would become acting President and be required to call presidential elections within three months. The vote would mark the greatest turning point for Russia since the Soviet Union's collapse in 1991.

CORRUPTION. Several ambitious politicians are angling to succeed the 67-year-old Yeltsin. But the two who stand out are the feisty, popular Luzhkov and the tough, charismatic Lebed. Although neither has declared himself a candidate, each is hustling to enhance his national reputation—and gear up a campaign organization. From Moscow to Washington to Beijing, the betting is that one of these flamboyant figures will win Russia's next presidential election.

For both men, the moment to strike is now. After almost seven years of economic reforms under Yeltsin, Russians are ready for a new direction. They're sick of delayed wages and disillusioned by corruption. In a recent poll, 80% of Russians said they wanted Yeltsin to resign before the end of his term. Lebed and Luzhkov are well situated to tap this vein of discontent. Both are independent of the Yeltsin regime. Each is a *muzhik*—the sort of earthy, can-do man

that Russians like as a leader. And each is at the top of his game. Luzhkov can point to six years of economic growth during his time as Moscow mayor. Lebed, after brokering peace in Russia's war with the breakaway republic of Chechnya, was elected governor of one of the country's richest regions in June.

But Luzhkov and Lebed have starkly contrasting visions of Russia's future. Neither offers the West the reassuring approach of Yeltsin and his market reformers. Instead, Luzhkov believes in tightly controlled state capitalism, with the state owning stakes in key plants. That is the model he used in rebuilding Moscow. Businesses run by Luzhkov's associates have flourished. Critics call it Moscow-style crony capitalism.

Lebed is chief among those critics. He opposes strong government involvement in

the economy and argues that Luzhkov's brand of capitalism breeds crime. In Lebed's view, state power should be used to enforce rules in the market, but the state shouldn't micromanage the economy or own too much of it. "It's the job of the authorities to protect businessmen from criminals and corrupt officials," he says. Above all, Lebed wants citizens to obey the law. But he insists that he would neither turn back democracy nor rely on repression.

Right now, the opinion polls favor Luzhkov over Lebed. A recent poll b

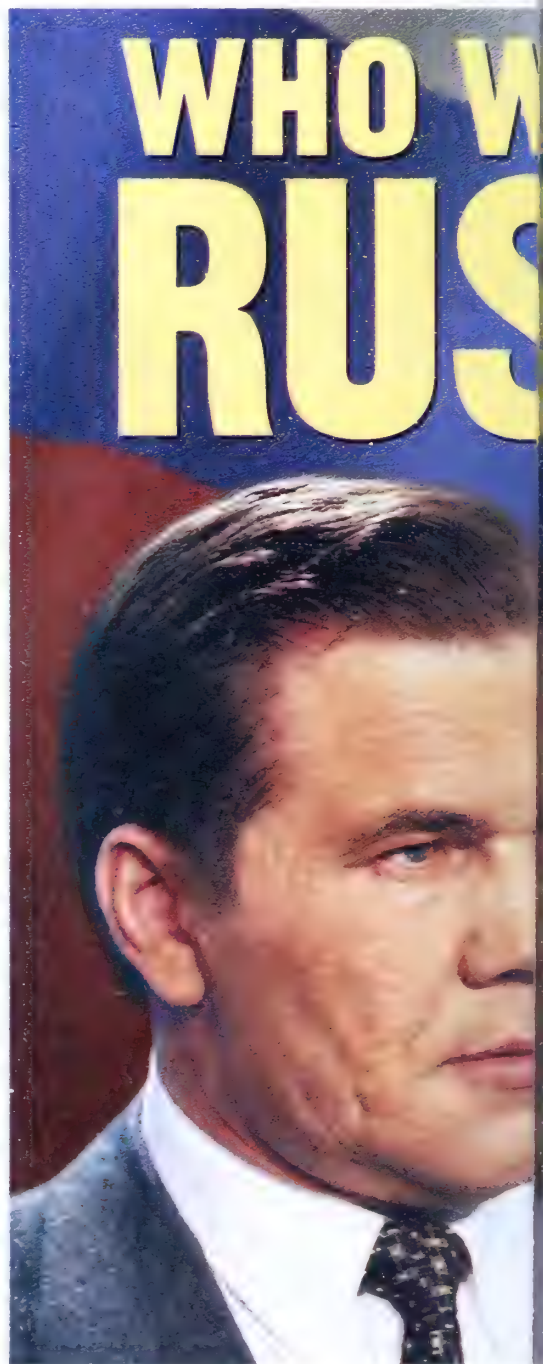
ALEXANDER LEBED

CAREER Recently elected governor of Krasnoyarsk. After coming in third in 1996 presidential election, served as outspoken national security chief until fired by Yeltsin. In his 26-year Army career, commanded troops in Afghanistan and hot spots inside Russia.

POLITICS Heads Russian People's Republican Party, which targets protest vote from poor people in Russia's provinces, disillusioned reformers, and nationalists. Favors free markets and a crackdown on corruption and tax evasion.

POWER BASE Backed by aluminum industry and bankers in Krasnoyarsk. Is allied with Boris A. Beresovsky, a wealthy businessman with large media holdings.

PERSONAL Now 48, he is married with three children. A nondrinker and a smoker, he is a chess enthusiast and former amateur boxer. Has no religious affiliation.



e All-Russia Center for the Study of Public Opinion found that Luzhkov could defeat Lebed 37% to 29% if elections were held today. The archrivals, of course, are not the only Russians with presidential ambitions. Surveys also show that the Communist Party's Gennady Zyuganov would be likely to win enough votes to make it into a runoff. Zyuganov would lose to all the other candidates in a second round, however, according to the polls. Grigory Yavlinsky, leader of the liberal Yabloko party, could accumulate enough votes to be-

come a kingmaker in the second round.

Meanwhile, the 68-year-old Primakov—a onetime apparatchik and Foreign Intelligence Service chief, whom Yeltsin tapped as Prime Minister in September—could also be a strong candidate. Primakov could use his role as acting President to win support, by taking a tough line against the West. He recently criticized the International Monetary Fund for refusing to help Russia. Over time, however, Primakov's popularity could plummet with Russia's economy, which is expected to shrink 7% or more in 1999, after contracting 10% this year.

Luzhkov's rating is high partly because he strikes a populist pose. A carpenter's son, Luzhkov is a skilled insider who worked his way up through the Soviet bureaucracy. Appointed mayor in 1992, after his predecessor

quit, he won 90% of the vote when he first ran in 1996. Now, as a "left-center" candidate, he has cozied up to Zyuganov in a bid to tap the votes of moderate Communists. If Zyuganov throws his support to Luzhkov, his chances of victory would increase.

Based on his Moscow experiences, Luzhkov has already proposed a plan for reviving Russia. He would kick-start the economy by lowering tax rates and removing obstacles to foreign investment in key industries such as oil and gas. But he would also strengthen state control by renationalizing oil, metals, and manufacturing companies that were privatized at give-away prices.

NO PAY. Luzhkov wants to extend his Moscow model across the country. The city has taken stakes in 400 businesses, from fast-food to refineries. It has also teamed up with a holding company called Sistema, which was founded in 1993 by Vladimir Yevtushenkov, chairman of the city's science and technology committee—and a friend of the mayor. With \$1 billion in sales from 180 enterprises employing 30,000, Sistema's holdings include banks where city funds are deposited, factories that rely on city subsidies, and construction outfits that have city contracts. Sistema and the city also share ownership of several companies, including TV Center, a national channel. While heading Sistema, Yevtushenkov serves in the city government but says he draws no salary.

Despite close ties between government and Sistema, Luzhkov rejects suggestions that the company could be an instrument of crony capitalism. "Can you remember even one scandal involving the city?" he demanded in an interview with BUSINESS WEEK. "We don't create scandals because we work with a budget—a civilized system. Moscow has created the most developed capitalist system in Russia," he adds. On his watch, Luzhkov notes, Moscow has accounted for one-third of all business activity in the country.

Can Luzhkov impose his Moscow formula nationwide? One obstacle will be money. Moscow has drawn more than half of all Russia's foreign investment in recent years, and the city has won a big share of tax revenues from giants such as Moscow-based Gazprom. But as President, Luzhkov would take over a government that has never raised enough taxes and could be frozen out of capital markets if it defaults on more than \$17 billion in hard-currency debts due in 1999. Still, Russian businesspeople tend to favor Luzhkov over Lebed. "My preferences go to Mayor Luzhkov

LEAD SIA?



YURI LUZHKOVA

CAREER Moscow mayor since 1992. Trained as an engineer, worked as bureaucrat in Soviet chemical industry before joining Moscow government as an economic development official in 1987.

POLITICS Recently started his own center-left party. A pragmatist, he backed Boris Yeltsin in 1996 but later distanced himself. May strike an alliance with the Communist Party. Favors government intervention in economy.

POWER BASE Hugely popular in Moscow, where he is tapping the city's resources to build a media network and national organization. Weak in distant provinces, however.

PERSONAL Now 62, he lives near Yeltsin in an exclusive development outside Moscow. Twice married, with four children, he is a nondrinker as well as an avid tennis and soccer player.

because we can see what he has done," says Leonid Rogozin, financial director of Izhevsk Radio Factory in central Russia.

There's no doubt that Lebed's economic policy is less clear. Businesspeople remember how, in 1996, the then-presidential candidate endorsed a liberal economic policy, then switched tracks by advocating more state control. These days, Lebed vows that he supports democracy, the free market, and foreign investment. He says he has no plans to renationalize privatized state enterprises and, unlike Luzhkov, would not bail out tycoons whose banks have gone bust.

EX-BOXER. Instead, Lebed is more likely to push insolvent companies into bankruptcy. A critic of the government's default on domestic debt, he is calling for creative approaches to rescheduling talks. In Krasnoyarsk, he wants to set up a fund of precious metals as collateral for loans. In general, though, Lebed has hardly begun to craft an economic policy in Krasnoyarsk. He has focused on law-and-order, setting up a team to uncover misuse of state funds and publicize the crimes of state officials.

A military man for 26 years and a former boxer, Lebed makes no effort to downplay his tough image. In his autobiography, he tells how, in Afghanistan,



WAVING GOODBYE? Primakov may take over if Yeltsin resigns, as seems more and more likely



he once punished 11 Army bullies by punching each one in the face. But that night, he recounts, he had a crisis of conscience, telling himself that if he couldn't command without using his fists, he wasn't fit to be an officer. Since then, Lebed has won respect as a soldier-peacekeeper. In the early 1990s, he quelled a near civil war in newly independent Moldova. More recently, he persuaded the Chechens to lay down their arms after almost three years of conflict with Russian troops.

Thus, Lebed may defy the expectations of those who fear he is a dictator in disguise. On a visit to Washington, "he seemed much more common-sensical, authoritative rather than authori-

tarian," says a U.S. State Dept. official. Lebed's own family history may also help hold excessive urges in check. His grandfather was placed in internal exile after being accused of being a *kulak*, or rich farmer, in the 1930s. Explain Lebed: "He was not a *kulak*. He had four children, two cows, two horses. The local authorities received an order to exile a certain number of *kulaks*. They didn't have enough, so he was arbitrarily placed in that category."

As the Yeltsin era draws to a close, Russians and Westerners must worry that Russia's experiment with democracy and capitalism will soon end, too. No doubt, Russia faces years of tumult as it struggles to rebuild its financial system after last August's devaluation and default. And the country has yet to grapple with renovating industry. These issues will pose huge challenges for either President Luzhkov or President Lebed. Equally clear, however, that Russians have grown used to being able to spend freely and travel where they like. Even if Lebed or Luzhkov clamp down on some freedoms, they are likely to face mass protests if they roll back democratic reforms too far.

For now, both Lebed and Luzhkov are racing against time. Until the presidential election is officially set, each must struggle to improve the dire economic situation in his own constituency. In Moscow, tax revenues are down an estimated 20%, unemployment is rising. In Krasnoyarsk, companies don't have enough money to pay suppliers, let alone taxes. In the capital, children beg for money on the city's central square. So, for both Lebed and Luzhkov, the sooner the elections take place, the better. Whether it happens this winter or a year, Russian voters will soon face another dramatic choice.

By Patricia K... and Carol Math... in Moscow, with J... Flynn in London and Stan Crook... Washington

How Russia Could Change Under a New President

	IF YURI LUZHKOV WINS...	IF ALEXANDER LEBED WINS...
PRIVATIZATIONS	Would likely be reversed, especially for companies sold off cheaply to tycoons. The state would take controlling stakes in key enterprises and might sell land.	Ones that were done under Yeltsin regime would be untouched, and more sell-offs of state assets would likely go forward.
INDUSTRY	Would receive more subsidies but would be tightly regulated. Bankruptcies would be kept to a minimum, preserving jobs but slowing down productivity improvements.	Would face a shakeout as the government enforced selective bankruptcies of companies unable to pay taxes. Corrupt factory directors would be prosecuted.
CRIME AND CORRUPTION	Would be condemned—but might end up flourishing in any case, as the government's bureaucracy grew to manage bigger state holdings in industry.	Would be a major issue, as the government would crack down on tax evasion and organized crime. Lebed says he would use constitutional means, however.
FOREIGN INVESTMENT	Would be encouraged, as it has been in Moscow. Investors may be offered shares in renationalized enterprises as compensation for Russia's short-term debt default.	Would be encouraged through new efforts to protect rights of minority shareholders. New proposals would be made to repay debts to Russian and international investors.
FOREIGN POLICY	Would likely take a more nationalistic tilt as Luzhkov opposes NATO intervention in the former Yugoslavia.	Would be more nationalistic, especially if the Baltic states or Ukraine seek to join NATO.

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COMMENTARY

By Stanley Reed

IS THE EURO'S POINT MAN FIGHTING THE WRONG WAR?

Hard as Wim Duisenberg's job sounded when he was named future head of the new European Central Bank (ECB), it has gotten a lot harder lately. Even in good times, setting a single interest rate for all 11 economies slated to join European monetary union (EMU) did not look like a cakewalk. Now that economic turbulence is buffeting Europe, the task could be murder.

Yet Duisenberg faces a challenge that could be even more troublesome than the slowdown. Thanks to voters' weariness with conservative governments and the austerity required to qualify for EMU, left-leaning politicians have come to power in France, Germany, and Italy. Duisenberg's tight-money stance is intended to counteract their potentially inflationary influences. But so far, that stance seems out of line with other central bankers' efforts to control the damage in the global economy.

INFLATION HAWK. Just a few months ago, economic growth forecast at 3% for 1999 seemed enough to override any problems on the road to EMU. Now, led by Oskar Lafontaine, Germany's new Finance Minister, Europe's politicians are calling for increased spending to bring down stubbornly high unemployment. They have also been pushing for speedy interest-rate cuts, although the ECB's mandate is to establish credibility for the euro by being hawkish on inflation. But the pols don't give a hoot about making the ECB's life easier. "In the 1970s, we had a turn away from welfare-state liberalism. Now, on the eve of the millennium, we are getting a turn away from crude monetarism," says Denis MacShane, one of the British Labour Party's parliamentary experts on Europe.



Meanwhile, Duisenberg has been downplaying the danger of global deflation, saying his job is to hold inflation to 2%. Duisenberg is of course mainly worried about shepherding the euro to the starting line, and under most circumstances, his tough talk would be smart. But with U.S. Federal Reserve Chairman Alan Greenspan cutting rates to help ease the global crisis, Duisenberg is looking too parochial to be central banker of a currency bloc that aspires to rival the dollar. At the very least, he should have signaled that Europe was ready to pitch in to help the world economy—emerging from the shadow of Germany's hard-line Bundesbank and perhaps even suggesting a German rate cut. "The ECB has played its cards very badly," says David P. Bowers, European equity strategist at Merrill Lynch & Co. in London.

Bowers and other observers in the City of London worry that the tension between the ECB and the politicians will escalate. In the worst-case scenario, the Germans and the French might push for big spending programs and put so much

heat on Duisenberg that he becomes even more resistant to rate cuts. The result: an overvalued euro that contributes to a sharp slowdown in Europe.

There is already talk of scrapping the tight budget criteria required of participants in the single currency. Big job-creation schemes such as new railways and roads are being floated at the European Commission. To finance them, some politicians have suggested raiding central bank treasuries or having Brussels issue new bonds.

But a debacle that spoils the euro's launch is far from inevitable. Although the recent sharp rise in world stock markets may prove fleeting, it could also signal an easing of the global financial crunch. If so, pressure on Duisenberg would diminish. The ECB is hinting

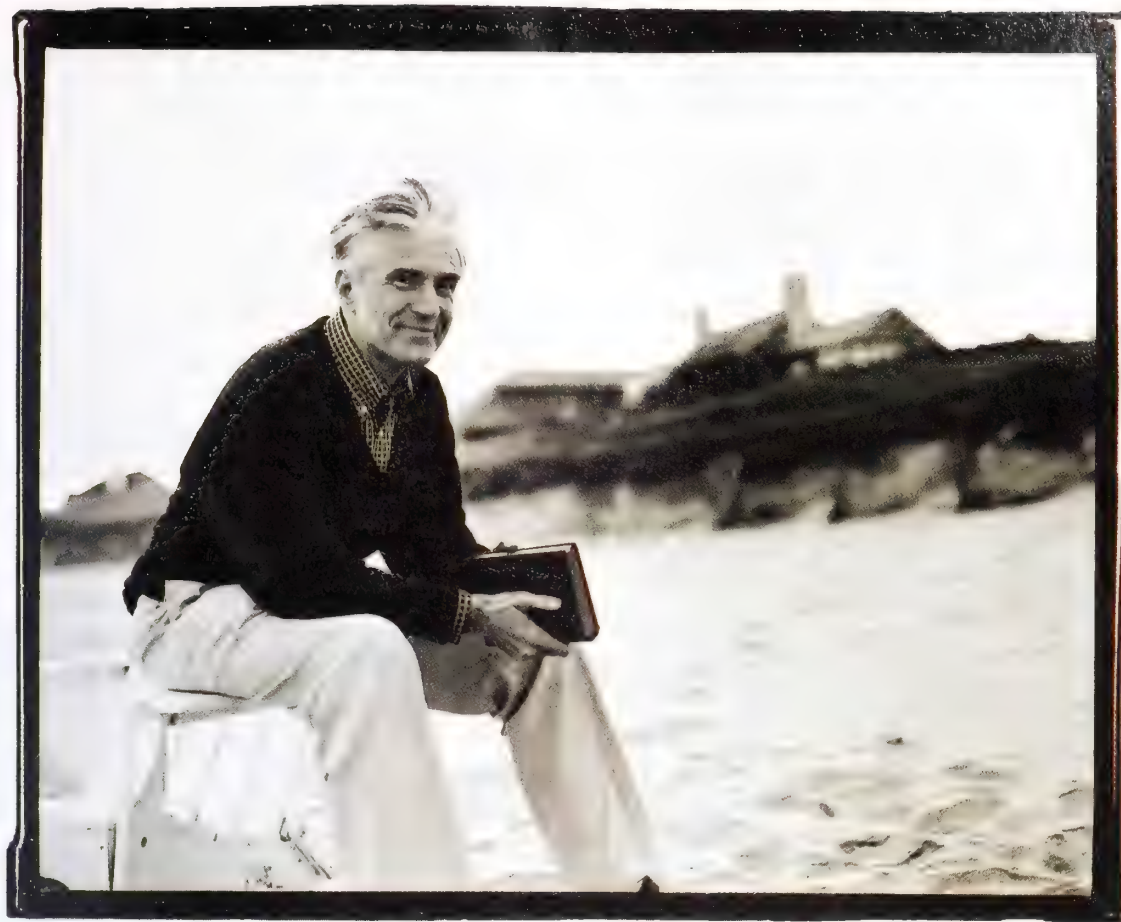
privately that it will be more flexible next spring once the euro is out of the box. And the new German government's real intentions are still unclear.

But we may be seeing the beginnings of a power struggle that could expose the flaws in the blueprints for the new Europe. For example, some critics have always doubted that a strong central bank could be sustained without a strong central government. To prove them wrong, Duisenberg needs to get better at explaining how the ECB will contribute to sustaining a strong European economy. The new central bank needs a statesman.

Reed is BUSINESS WEEK's London bureau chief.

DUISENBERG

His tight-money rhetoric seems to be at odds with the global economic turbulence buffeting Europe



*Go confidently in the direction of your dreams.
Live the life you've imagined.*

—Henry David Thoreau

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HOW A BLOOD FEUD IN MALAYSIA SPUN OUT OF CONTROL

A fight over economic policy turned personal. Now, it could result in national upheaval

To Prime Minister Mahathir Mohamad, Malaysia's annual air and boat show on the island of Langkawi was an event he hated to miss—even as his nation stumbled through an economic crisis. So Mahathir decided to hold the Dec. 3, 1997, meeting of the Malaysian Cabinet on the island.

But by the time he arrived, Mahathir found that his next-in-command—Deputy Prime Minister Anwar Ibrahim—had virtually concluded the meeting without him. In what amounted to an economic coup, the Cabinet had adopted an austerity plan similar to those imposed on neighboring Thailand and Indonesia by the International Monetary Fund. The plan would slash public spending and big projects championed by Mahathir.

The new policy was a stunning rebuke to Mahathir. Since the onset of the Asian crisis five months earlier, he had been railing against a perceived Western conspiracy and insisting Malaysia could maintain its breakneck growth. Mahathir humbly agreed to go along with his Cabinet's decision—but on the next day undercut it by saying Malaysia would proceed with a controversial \$2.7 billion rail and pipeline project. The ringgit hit a new low.

CROSS PURPOSES. That episode was a prelude to Malaysia's worst political crisis in decades. Although Mahathir and Anwar had long disagreed over economic stewardship and political spoils, the rift widened as Asia's financial crisis wore on and the two leaders worked increasingly at cross purposes. Ultimately, Mahathir clamped controls on the currency and jailed Anwar, casting himself as an international rogue.

Today, the clash threatens to send Malaysia into upheaval. Anwar, a central player in the old patronage system, has now emerged as a hero of the swelling *reformasi* movement, which advocates a more open society and economy. He goes on trial Nov. 2 on 10 charges of sodomy and corruption. A conviction could spark an ugly confrontation.

How did the two men end up so militantly opposed to each other? Just a few years ago, Anwar was Mahathir's

anointed successor to lead the ruling United Malays National Organization (UMNO). Of the two, Anwar, 51, was the more friendly to the West. Mahathir, 72, liked to rile the West. But like Anwar, he saw foreign investment as key to Malaysia's economy. Both were savvy politicians who steered choice deals to their allies in business.

Still, Anwar had in recent years in-

creasingly called for the rule of law and more transparency. But he was willing to bide his time until he ran the country. Then the crisis erupted. Anwar saw that the meltdowns of Thailand and Indonesia were caused by bad economic management—and the same could happen in Malaysia without swift action.

Mahathir looked at it differently. It was in the twilight of his career—as

Anwar vs. Mahathir: An Escalating Battle

JULY 24, 1997 Mahathir begins to blame foreign financiers and Japan for Asia's meltdown. Anwar pressures investors Malaysia to adopt radical policies.

AUG. 12, 1997 Anwar announces a halt to big public projects, including a huge dam and airport. Two days later, Mahathir contradicts him. Anwar plunges.

DEC. 3, 1997 After meeting with IMF chief Michel Camdessus and other officials over a controversial corporate bailout, Anwar pushes an austerity plan through the Cabinet. Mahathir agrees, but days later starts backtracking.

APR. 15, 1998 In New York, Mahathir blasts "perverse patronage" and calls for "creative destruction." Mahathir is outraged. Meanwhile, offstage, Anwar attempts a bailout of Malaysia Airlines, which Anwar thwarts upon his return.

JUNE 20, 1998 The feud bursts open as the Anwar and Mahathir camps trade charges of cronyism at a ruling party convention. Mahathir's allies distribute a book alleging corruption and illicit sex by Anwar.

SEPT. 1, 1998 Mahathir unveils emergency controls. Soon after, Mahathir sacks Anwar and has several associates arrested. Anwar calls for public rallies. Mahathir orders Anwar's arrest, setting the stage for Anwar's Nov. 2 trial.



ared for his legacy. Mahathir genuine-thought the system he proudly calls "Malaysia Incorporated" was a legitimate development model. A handful of althy businessmen are given the role implementing big projects and keeping the economy humming. Then wealth eckles down. "We view Malaysia as a corporation, and the shareholders in the vernment are companies," says Mupha Mohamed, the new No. 2 at the nance Ministry. "To the extent you lp the bigger guys, the smaller guys nefit." Mahathir declined to be interviewed.

The crisis provoked a fury in Mahathir toward the outside world. Two ys after Mahathir returned from a o-month foreign trip in July, 1997, he gan blasting "international manipula-s" such as financier George Soros l Jewish traders for trying to undo e success of the Muslim Malaysians. war, in contrast, tightened up on ney and began urging Mahathir to

suspend big public works. When Mahathir agreed on Sept. 5 to postpone the \$5.3 billion Bakun Dam, a new airport, and plans to build the world's longest building, the market enjoyed the largest one-day surge in over three years. But the rally fizzled.

Mahathir's patience ran out. On Nov. 21, he named a panel to devise remedies that included himself, Anwar, economic adviser Daim Zainuddin, and prominent economists and businessmen. Council members quickly squared off over whether Malaysia needed austerity or easy money and more government spending. After months of debate, "we became convinced that you cannot go on with tightening monetary policy," recalls Zainal Aznam Yusof of the Institute for Strategic & International Studies.

Then came a move that rocked market confidence and drove a deeper wedge between Anwar and Mahathir: the bailout of Renong. Headed by Mahathir associate Halim Saad, Renong

Petronas unit. "I didn't ask him to intervene. I just told him that any businessman faced with this situation will have to sell and pay down the debt," says Mirzan, who holds a Wharton MBA.

In April, the Anwar-Mahathir rift grew wider. Speaking in New York at the elite Council on Foreign Relations, Anwar declared that Malaysia's public purse had become "a rich feeding ground for all kinds of parasites." Anwar also touted the virtues of "creative destruction." Mahathir would deride that term for months. In New York, Anwar got wind of another bailout, this time for Daim pal Tajudin Ramli at Malaysia Airlines. "The moment my back is turned, they push through this nonsense," he told aides. Anwar threatened to veto the deal, which was never done.

Indonesia's Suharto fell soon afterward, and by the time the UMNO General Assembly met on June 20, Mahathir was convinced Anwar's supporters were out to topple him, too. All 1,900 conference

HEAD TO HEAD When the Asian crisis hit, Anwar wanted to end Malaysia's patronage system. But Mahathir genuinely believed it was a legitimate model for developing nations

had built some of Malaysia's biggest projects but was choking under a pile of debt. In a complex transaction that left minority shareholders in the cold, Renong subsidiary United Engineers Malaysia (UEM) paid a stiff premium to buy out the parent company. Analysts suspected that Mahathir allies benefited, a charge Renong denied. Anwar ordered regulators to investigate. UEM was found to have broken disclosure rules, but the punishment was light. Stocks plunged.

"MORAL OBJECTION." Days later came the meeting on Langkawi, where the Cabinet agreed Malaysia needed austerity. But business leaders were growing unhappy, as was Mahathir. "The intensity of business collapses and bank collapses was like tenpins falling every day," says Mahathir ally Francis Yeoh, managing director of YTL Corp. "He couldn't stand it." Adds another prominent businessman: "He doesn't believe in bankruptcies. He has a moral objection to them."

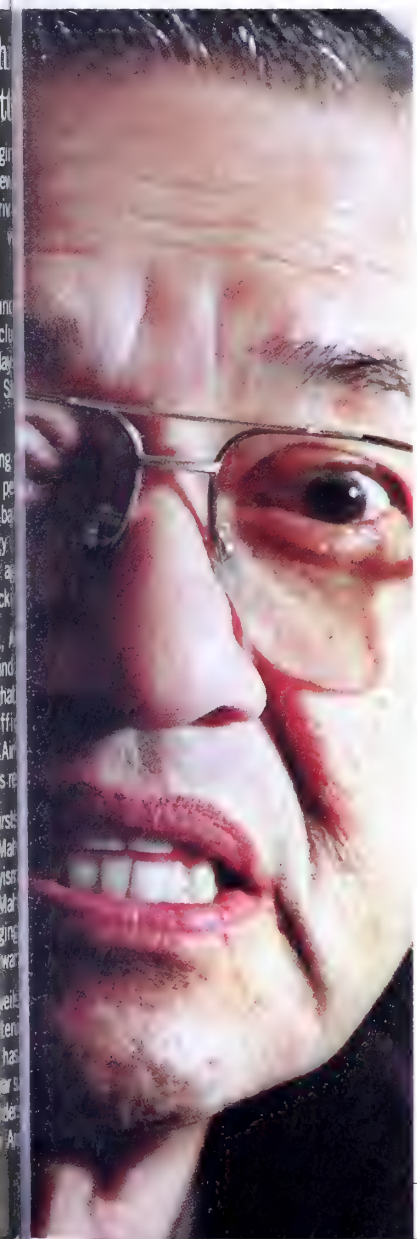
The attempts to get around Anwar's IMF-style budget grew. Anwar aides contend Mahathir suggested that Petroliaim Nasional (Petronas) bail out his son Mirzan Mahathir's shipping company, Konsortium Perkapalan, which had trouble servicing its \$490 million debt. Both Mirzan and Petronas deny the Prime Minister was involved with the \$220 million purchase of KP's assets by a

attendees received a book alleging sexual affairs by Anwar and accusing him of espionage. Anwar's camp returned fire. The leader of the UMNO youth league criticized the government for "corruption, collusion, and nepotism." Mahathir retorted that even Anwar had benefited from public largesse. Days later, Mahathir named Daim to take over management of the economy from Anwar.

After another market slide, Mahathir on Sept. 1 imposed currency controls and soon after told Anwar to resign. When he refused, Mahathir dismissed him the next evening. But Anwar was not finished. He organized the biggest protest in Malaysia's history on Sept. 20 to call for reform. Mahathir ordered Anwar's arrest that night. A week later, Anwar appeared in court, bruised from what he said was a police beating.

Whatever the verdict in Anwar's trial, it is unlikely to end the momentum for reform, although no one wants a repeat of the violence that marked Suharto's fall. Mahathir seems intent on staying in power to safeguard the economic structure he spent 17 years building. But even if Anwar vanishes from power, the questions he has posed will haunt his stern mentor for years to come.

By Sheri Prasso and Mark Clifford in Kuala Lumpur, with Joyce Barnathan in Hong Kong





CHINA

A CRACKDOWN ON SMUGGLERS —AND FOREIGN COMPANIES

Beijing's drive is making life easier for local manufacturers

Beijing is turning up the heat on smugglers. Underscoring the drive to seal porous borders from tax-evading goods, Premier Zhu Rongji in October led an 80-member inspection team across the south. "Progress in the antismuggling battle has been very unbalanced in some areas, and we cannot overestimate our achievements," he said after the tour in Guangzhou, where he called for military and provincial leaders across China to step up their efforts.

The crackdown's goals seem obvious: End the corruption in China's armed forces that provides most of the pathways onto the mainland for smuggled goods, start collecting as much as \$12 billion in lost central government revenues, and reverse the estimated \$20 billion in capital flight, a significant portion of which has gone to pay for smuggled goods. But some foreign companies are starting to suspect another motive: They fear that Beijing is attempting a sneak attack on some of their market successes in China. "One goal is clearly to protect local industry," says a Western diplomat.

The rules of the game are changing. As China reins in smuggling, it's disrupting operations and in some cases cutting market shares and profits for foreign producers of everything from computers to color film. "Companies are being approached by government officials and being told to prove they are serving the market with [local] production," says Tony Perkins, a principal at McKinsey & Co.-Greater China.

Until now, many foreign products have been smuggled into China to avoid import duties. They range from 20% for computer goods to 150% on cars, plus a value-added tax of usually 17%. An es-

THE SMUGGLER'S ADVANTAGE

- Import duties on parts and taxes add \$78 to the cost of producing a \$300 cell phone in China.
- A similar phone can be purchased by a Hong Kong middleman in Europe, for example, for \$78 less.
- The middleman then pays \$30 or so to bribe a customs officer or the military at the Chinese border to let the phone into the country.
- The smuggled phone sells in China for \$48 less than the locally produced version.

GATA-BUSINESS WEEK

BEIJING BUYERS

Many high-tech products sold in China are "gray imports"

estimated 80% of products in many of these categories have been smuggled or are so-called "gray imports"—brought in without paying full duties.

Foreign companies themselves usually are not involved in the smuggling; instead selling their products to Hong Kong-based middlemen who bring the goods into China. Some companies have even produced goods on the mainland, exported them to Hong Kong to get tax breaks on their imported components and raw materials, then seen the products return illegally to China.

Take the computer industry. Facing with average tariff levels of 20%, foreign manufacturers have relied on gray imports. Now, with the crackdown, companies are finding their computers suddenly unavailable. "Local manufacturers will gain market share, and foreign brands will have to consider ramping up production in China," says Robert S. Chu, managing director of South Asia for Gateway Inc. Indeed, local product Legend Computer, the market leader is crowing. Its sales have jumped 4% since the crackdown started.

HEADACHES. Illicit imports have played a major role in feeding China's tremendous demand for mobile phones. As much as 70% of the hot-selling phones of Ericsson and Nokia Corp. have been slipped in from Hong Kong, say industry analysts. John Gilbertson, president of Ericsson (China) Co., says that gray imports of Ericsson mobiles have never exceeded 30% of China sales and estimates they have now fallen to single digits. Nokia China declined to comment on such imports, but a spokesman says "the majority of Nokia phones sold in China are manufactured in our production plants in China."

Foreign companies are hoping to end the headaches of dealing with China's smuggling trade and periodic crackdowns will disappear. In the last three months, the government says it stopped 11 smuggling attempts at smuggling, involving goods worth \$600 million. But the smuggling may not end until China finally joins the World Trade Organization. Then the high tariffs will have to fall—and there will be need for smugglers.

By Dexter Roberts in Beijing, with Bruce Einhorn in Hong Kong

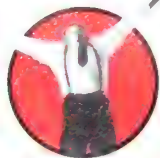
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incredibly

cool.

Teligo is here.

Now any size company can have the
service and savings of a mega-size



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company.

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EDITED BY JOHN TEMPLEMAN

THE ACHILLES' HEEL OF ISRAEL'S PEACE PROCESS: ECONOMICS

When Prime Minister Benjamin Netanyahu signed the Wye peace agreement with Palestine National Authority Chairman Yassir Arafat on Oct. 23, he plunged coalition government into turmoil and Israel into a political crisis. Coming on top of the country's gathering economic troubles, it could force early general elections as soon as March, 18 months ahead of schedule.

A dangerous rage over the land-for-peace deal is convulsing the Israeli right. Demonstrators chanting "Bibi is a traitor" outside Netanyahu's official residence in Jerusalem were

the outward face of the anger. Core supporters from within his own Likud Party, as well as settlers and religious conservatives, are deserting him. Netanyahu needed votes from the opposition Labor Party to survive an Oct. 26 confidence vote. Labor, in a bizarre alliance with security hawks and religious ultras, may still push for early elections after Wye is implemented.

KEY DEFENSE. Security is the central issue in Israeli politics and will dominate any election campaign. But the faltering economy will be an albatross around Netanyahu's neck. Growth has slowed to 1.5% this year from 6% last year, when a six-year-long expansion ran into sand. And the once vibrant annual growth in high-tech exports has tumbled to single digits.

Expectations of any quick recovery were dashed by a two-percentage-point increase in Israel's key lending rate, which was raised to 11.5% on Oct. 26. The central bank is bent on defending the shekel, which is down 18% against the dollar this year. "An early election will be close, and the economy will prove to be the deciding factor," says Hanan Crystal, a senior political analyst.

Though economics has rarely been mentioned in the peace process, it is proving to be its Achilles' heel. The euphoria after the 1993 Oslo agreement added to a boom that was already under way in Israel. As a result, per capita income is now \$17,500 a year, higher than Spain's and approaching Britain's, up from \$13,500 in the early 1990s, according to Washington's Arab American Institute.

But the trickle-down wealth that was supposed to suffuse Palestine and Jordan and wean their populations from military has never materialized. By any measure, the \$5 billion

Palestinian economy is in terrible shape. Growth has been negligible for two years, investment is nearly nonexistent, and unemployment is 20%. Indeed, per capita income in the Gaza Strip has fallen to \$600 from \$800 before Oslo, while on the West Bank it's down to \$1,300 from \$1,600. Such trends have played into the hands of Arafat's critics in the militant Hamas organization. "The last five years have been devastating," says James J. Zogby, president of the Arab American Institute. "It's very disturbing."

Under the Wye agreement, the Palestinians finally will be allowed to open the completed Rafah airport in the Gaza Strip. They will also get two road corridors between Gaza and the West Bank. But any economic payoff will be a long time coming. "Investors will wait and see if the Israelis implement the agreement before putting any money into new projects," says Samir Hulileh, a leading Palestinian economist.

Jordan is not much better off. Its economy is expected to grow less than 1% this year, and unemployment has topped 18%. The distrust of Israel in Jordan's business community has limited joint projects to a mere handful. And the few that do exist are slow to deliver their benefits. The foundation stone for a dam near the Israel-Jordan border to divert much needed water to Jordan, for instance, has only just been laid.

TIGHT-LIPPED. Even if it sincerely wanted to, Israel doesn't have the financial wherewithal to kick-start its neighbors'



WELCOME BACK: But right-wing outrage could topple Bibi

economies. So unless donor countries commit themselves to large-scale aid when they meet in December, the peace dividend remains a distant prospect. Washington is remaining tight-lipped about how much it might put up. But according to Beltway gossip, the Clinton Administration is working on a package of up to \$300 million for the PNA. Jordan is also waiting in line. But the biggest beneficiary will be Israel, which may get as much as \$1.2 billion.

With the economies of all three major parties in the peace process in trouble, outside money can help. But the peace won't be cemented without the political backing of local populations—and that may soon be put to a severe test in an Israeli election.

By Neal Sandler in Jerusalem, with Stan Crock in Washington and Kirk Albrecht in Amman

BRANDING ON THE NET

The old rules don't apply. So how do you hustle those wares online?

Devotees of Troy and Linda will never know how their romance turned out. Bell Atlantic Corp. has pulled the plug on its online soap opera, which revolved around the yuppie newlyweds. The weekly installments ran on the Bell Atlantic corporate Web site last year. The serial had lots of fans. It won rave reviews from entertainment critics. But the Baby Bell's research showed Troy and Linda didn't do a thing to build the Bell Atlantic brand. No bounce in brand awareness surveys. No spike in consumer loyalty. "Creative is fine," says Janet Keeler, vice-president for brand management at Bell Atlantic. "But that kind of creative just didn't pan out. We want to build our brand on the Web."

She and everyone else in the marketing community. Harnessing the reach and interactivity of the Internet to build and maintain brands has become the Holy Grail of marketing. It's the focus of conferences. The subject of committee meetings. The talk of the consultancy circuit. The tantalizing prospect of pushing a brand name and stoking consumer



valty in the one-on-one setting of the personal computer attracts everyone from carmakers to newspapers. But as all Atlantic discovered, branding tactics at work in the real world don't always translate online. "It's the biggest issue facing the marketing community in years," says Elliott Ettenberg, CEO of Zell Retail Advertising. "What keeps all up at night is the idea: Is my

competitor going to figure it out first?" The buzz about branding on the Net has intensified in the past year, in part because Procter & Gamble Co., the nation's second-biggest advertiser, mobilized interest with its Internet advertising summit in August. More important, the first handful of legitimate, recognizable brand names have emerged from the chaos of the virtual

world. As companies such as America Online, Amazon.com, Yahoo!, and Netscape Communications graduate from obscure virtual businesses to those that score in the 50% range on unaided brand-recognition surveys, marketers have begun to salivate. The potential is there, they say. A brand can grow and secure customer loyalty on the Net. And as today's huge generation of computer-savvy kids matures, that power will only increase. "That has all of us wondering how can we do it, too," says Joel Anderson, who heads up Internet marketing for Toys 'R' Us Inc. "To do it well is worth millions."

Marketers, who have used TV and print ads for decades to imbue even cigarettes and dish detergent with an emotional aura, know full well the value of a strong brand. "A brand is the emotional shortcut between a company and its customer," says Ted Leonhardt, principal of Leonhardt Group, a brand-marketing firm. But as the older mass media of TV

Marketing

and print become more fragmented and crowded, their ability to build brands has weakened. The advertisers whose real-world brands grew up with TV worry they'll be left out if they don't solve the enigma of marketing on the Net.

For companies whose businesses are based on the Internet, forging a recognized brand name is even more important. With nothing to pick up or touch and hundreds of similar-sounding sites to choose from, online consumers have little to go on besides a familiar name. In cyberspace, anyone with enough resources to rent space on a server and build some buzz for their brand is a potentially dangerous competitor.

NO POP-UPS. But just as the need to build brands on the Internet is spiking, there's a growing recognition among marketers that the tactics they have tried so far have been ineffective. The emotion-laden vignettes that work so well on TV simply don't woo viewers in cyberspace. Meanwhile, the established methods of Internet advertising don't do much better. Interstitials, ads that

What Would Make Net Consumers Click

ADS MORE INFORMATIVE	71.4%
SWEEPSTAKES OR CONTESTS	33.8%
MAKE ADS MORE CREATIVE	33.1%
OFFER AWARDS/CASH	20.5%
AFFINITY PROGRAMS	3.4%
DON'T KNOW	12.1%

DATA: NFO INTERACTIVE FOR JUPITER COMMUNICATIONS



A TWO-WORLD STRATEGY

The biggest brands on the Internet craft distinct images in both the real and virtual worlds. For many, real-world ads are a softer, more emotional sell. Online, the consumer gets individual attention.

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The all-new version of America Online is easier, faster and better than ever. It's a snap to install, comes with FREE 24-hour customer service, and connects you with lots of stuff you can't find anywhere else.

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REAL WORLD

[illegible]

AMERICA ONLINE

SNAIL MAIL. AOL is famous for its nonvirtual marketing, such as mass-mailing sample disks of its service with computer magazines and using TV and print to lure more subscribers. It also does some online marketing, linking to popular search engines.

just pop up on the screen, are tagged as annoying interruptions to the online experience. Spending on banner ads is expected to drop next year as companies conclude that computer users are ig-

ers of consumer products. There are frighteningly few ways to make soap or soda useful in the virtual world. Indeed, of the top five buyers of TV advertising, most are nearly invisible online.

But companies that can provide a time saver or money saver online are diving in. MasterCard International Inc., in search of a rational branding plan, has transformed its Web marketing from one that simply hypes the card to

noring them. "You're not allowed to say or market anything online unless the customer wants to hear it," says Chan Suh, CEO of Agency.com Ltd., an interactive consulting firm. It's the central theme differentiating television from Internet marketing, he says. "In this kind of marketing, the customer is in charge."

That means marketers set on building their brands in the online world have to persuade consumers to participate in their marketing efforts. The latest theory of how to do that involves something called "rational branding." The idea is to marry the emotional sell of traditional brand marketing—the pitch that links "Disney" with "Family" or "Volvo" with "Safety"—with a concrete service offered only online. Rational branding strives both to move and help the online consumer at the same time. In essence, the advertiser "pays" the consumer to endure the brand message by performing some kind of service. But the tactic poses a real challenge to mak-

one that offers a helping hand to the online shopper. While MasterCard punts out shamelessly schmaltzy TV commercials—such as one with Mark McGwire sending No. 62 over the fence under the tag line “Priceless”—its online branding efforts take a different tone. The

company is pushing Shop Small, a sort of MasterCard seal of approval given to E-commerce sites that use advanced credit-card security systems.

The program lets MasterCard slap its logo all over the hottest new online shopping sites. It also gives the company a chance to promote its Internet image. While the TV pitch is clearly about using MasterCard to achieve a peak experience, online the image is about security, trust, and service. "The TV user is looking for entertainment. The Internet user is online for more practical reasons," says Debra Coughlin, of the co-

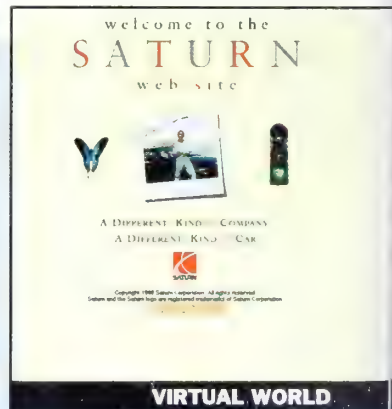
pany's Internet marketing team. "Our brand efforts reflect that end-user goal."

LESS HYPE. When General Motors Corp.'s Saturn revamped its Web site to offer more help and less hype, it was easy to measure the improvement. Site visits over the last year tripled to more than 7,000 a day. An astounding 80% of Saturn's customer leads now come via the Internet, almost double a year ago. Saturn's old site offered only usual car specs and dealer referrals. Last year the carmaker began adding features that were actually useful, including a lease-price calculator, an interactive design shop for choosing options, and an online order form. They highlighted the new online features with a TV commercial that delivered an e-

Marketing



REAL WORLD



VIRTUAL WORLD

SATURN

LIKE ORDERING PIZZA. GM's revamped Saturn Web site is all business. It helps serious car buyers with projects such as selecting a model, calculating payments, and finding a dealer online. Offline, the Web site is the star of Saturn's humorous TV commercial showing a college student ordering up a car over the Internet. The successful television commercial has tripled visitors to the Saturn Web site.

he has 1200 on her SATs,

litters in three sports,

and mutual funds from GE.

For you can fund a college education with a name trust. GE.

Attending a private college for four years costs over \$80,000. For a child born today, it will be well over \$200,000. Be ready when you're with mutual funds from GE Financial Assurance. The GE family of mutual funds has over \$20 billion in assets, so take advantage of GE expertise, and get the innovation you've come to expect from GE. For more information, speak with your broker or financial advisor. Call 1-800-242-0134 or visit us at www.ge.com/mutualfunds. Whether it's for college funding, retirement or anything else, when you think of mutual funds, think of GE.



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CYBERCOP SCANNER, OUR VULNERABILITY ASSESSMENT MODULE, TUNES GAUNTLET BY SIMULATING AN ACTUAL HACKER ATTACK AND CRACKING PASSWORDS INSIDE YOUR NETWORK. WHEN CYBERCOP SCANNER COMPROMISES YOUR NETWORK SECURITY, IT CAN PROACTIVELY TERMINATE EXTERNAL WAN ACCESS WITHOUT ADMINISTRATOR INTERVENTION, PREVENTING THE BREAK-IN FROM BECOMING A REAL WORLD ATTACK. MEANWHILE, CYBERCOP NETWORK PASSIVELY MONITORS YOUR NETWORK



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...R HACKER SIGNATURES WHILE
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...WAYS AND MICROSOFT NT PROXY
...VERS), GAUNTLET ACTIVE FIREWALL
...VIDES THE ONLY COMPLETE,
...TEGRATED SECURITY SOLUTION
...ABLE TODAY.

...est-of-Breed & Integration without Compromise.
...V YOU NO LONGER HAVE TO
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...TIGHT INTEGRATION AND SINGLE
...DOR SUPPORT. WITH GAUNTLET
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...IVITY AUTOMATICALLY GENERATES A
...BLE TICKET TO OUR MAGIC TOTAL
...VICE DESK AND THEN ACTIVATES
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...TING MODULE — ALL WITHOUT ANY
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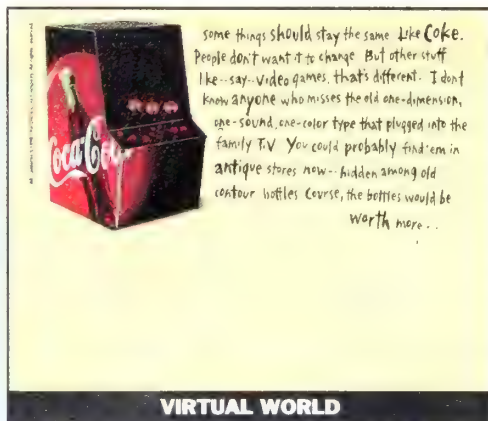
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 **network**
ASSOCIATES
Who's watching your network



COCA-COLA

JUST PASSING THROUGH. Coca-Cola still pours most of its advertising effort into television and print. It uses its Internet site to tout promotions and to appeal to niche groups such as collectors of vintage Coke products. Early experiments linking Coca-Cola.com to Internet entertainment sites sent consumers away too quickly. Revised Web marketing is designed to let Net surfers linger.

fashioned emotional brand appeal. The humorous TV ad features a college student in his dorm room using the Internet to order a Saturn, as easily as one might order a pizza. The site quickly took off. "This improves our brand position in a way an online brochure could not," says Farris Kahn, Internet coord-

ing through the online-marketing industry. Two top Net consultants, Jupiter Communications and Forrester Research Inc., have released studies examining the practical turn of Net marketing. Jupiter coined the phrase "rational branding." Forrester's Jim Nail calls the tactic of adding an interactive service "experiential marketing." "Experiences—not advertising-induced perceptions—will drive brand attitudes," he says. He expects spending on experiential marketing will grow from \$1.1 billion this year to \$11.2 billion in four years, while spending on banner ads will top out at \$300 million in the next year and begin to decline.

But for most packaged-goods marketers, who have little to offer online, the trend toward rational branding poses a huge dilemma. More than half of consumers surveyed by Jupiter say they never visit a consumer-product Web site. Even the most popular ones pale in comparison to truly high-traffic locations. In May, Budweiser.com, among the top five most popular consumer-product sites, drew 180,000 visitors, according to a study by Jupiter Communications. Meanwhile, Netscape.com welcomed 10,828,000.

It's not that the packaged-goods makers haven't tried. But they are rapidly discovering that what made them powerful on the TV screen does not easily translate to the comput-

er screen. Consider Coca-Cola. Recognizing its slick TV commercials wouldn't play well on the Internet, Coke tried a different tactic—that works beautifully in the real world. It acted as sponsor for entertainment. For example, the company rigged its CherryCoke site as an entertainment gateway filled with links to interesting sites around the Internet. Coke executives thought the site was fine until they realized consumers were spending an average of 90 seconds on it before moving on. That may be a long time on TV, when consumers are passively letting an ad pass over them. But for a consumer searching for something else, it's far too short to make an impact. "We wanted to use the site to capture our consumer and provide a unique brand experience," says Scott Brannan, Coke's manager of interactive communications. "But all we were getting to do was say, 'Thank you for coming.'" Now the soft-drink maker's site focuses more on promotions, while keeping the Internet consumer looking at the Coke logo a little longer.

WAIT FOR VIDEO? Others have tried a service proposition, with only mixed results. P&G offers the Stain Detective site; Unilever's Ragu brand has a popular site filled with recipes; and Bristol-Myers Squibb Co.'s Clairol site allows consumers to scan in a personal photograph and experiment with different hair colors. The idea is to let consumers "own" a brand online. But even as these sites win praise from consultants, traditional brands continue to get most of their boost from traditional marketing. "I don't see direct marketing or traditional advertising being much easier to show a return on investment," said Peggy Kelly, vice-president of advertising services at Bristol-Myers, at an industry conference in August.

Does all this mean that the Internet is simply the wrong place to advertise for beer and soda pop? The answer may be yes, for now. Some big brands are settling for a dollop of consumer attention online while they wait for the Web to grow up. McDonald's sports a Web site where everything from financial data to kids' games. David G. Green, senior vice-president for national marketing, says Web marketing will only be a sliver of the total. Donald's game plan is to wait until the technology is ready for more video and

Marketing

inator for Saturn marketing. "By giving the consumer something they want, you are helping them and promoting your brand message at the same time."

How did marketers figure out the potential of offering consumers a practical benefit online? By watching the Internet brands build their businesses into powerhouses. The common thread running through the successful online technology sellers, such as Dell Computer Corp., and such retail and service companies as Yahoo!, Amazon.com, and America Online, is that they help the Web-surfing consumer do something.

BUILDING BLOCK. Dell lets customers configure and price a computer system online. Yahoo! and AOL offer a slew of options for customizing their services. David Risher, senior vice-president for product development at Amazon, says that more than any ad or sponsorship, the Web site itself is the crucial building block for his brand. And he says that "70% to 80% of the feeling people have about the brand is from the experience they have online at our site." Much of Amazon's effort at brand building is therefore focused on improving the site with frills such as one-click ordering and software-generated book recommendations.

The success stories are reverberat-

TV Ad Leaders Pale Online

BIGGEST SPENDERS ON TV

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- ▶ PROCTER & GAMBLE
- ▶ JOHNSON & JOHNSON
- ▶ PHILIP MORRIS
- ▶ FORD MOTOR

BIGGEST SPENDERS ONLINE

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dio programming. "It is more difficult for those of us who do not have a good or service that is transferable to a virtual experience," says Green. But while TV and print are more powerful now, tools such as full-motion video will someday be more available online. "That makes it important for us to be in touch with the Internet," Green says.

He, like others, acknowledges that despite current difficulties in marketing online, in the long run no one can afford simply to ignore the medium. The Net offers an extremely attractive demographic mix that will only get better. Already, the online world is losing its status as a boys' club; women now make up 38% of Web surfers. With a median income of \$63,000 and a heavy tilt toward the professions, Internet users are a brand marketer's dream. Most compelling of all, the current generation of children is the largest since the baby boom, and they are growing up with the Net as a given. As they mature into the next great consumer generation, no marketer will be able to ignore one of their favorite media.

The hope among the traditional TV advertisers is that new technology will give them a way to present the emotional visual pitches that have worked so well for them elsewhere. IBM just unveiled HotMedia, a new Java-based

Where the Net Users Are

CONSUMER PRODUCTS WEB SITES	VISITORS PER MONTH
KODAK.COM	184,000
KRAFTFOODS.COM	182,000
BUDWEISER.COM	180,000
REVLON.COM	178,000
COCA-COLA.COM	153,000
MOST VISITED WEB SITES	VISITORS PER MONTH
AOL.COM	19,179,000
YAHOO.COM	18,300,000
GEOCITIES.COM	11,341,000
NETSCAPE.COM	10,828,000
MICROSOFT.COM	10,455,000

SOURCE: MEDIA METRIX, PC METER CO., JUPITER COMMUNICATIONS

consumers can command all the wizardry of the Internet from their living-room entertainment centers. "Eventually, this medium is going to hit our business," says Denis F. Beausejour, P&G's vice-president for worldwide advertising. "It's critical that we be in this space, experimenting, trying to develop our own business models."

Interestingly, one industry that's already getting the hang of the Internet is retailing—an industry experts predicted would be especially threatened by the medium's emergence. Stores have begun to use their Web sites as both a sales channel and a place to build consumer loyalty and extend brand awareness. Macy's online services, for example, offer a gift registry and personal shopping assistance via E-mail. Visitors to the site, drawn by TV and print ads, are younger than the average store shopper and are more likely to be male than the average. "It's clear the Internet presence is extending our

brand to shoppers we were not reaching with our stores," says Kent Anders, president of Macys.com. "To us, this is classic brand building."

The retailer success stories hold a lesson for all marketers: The Internet cannot build a brand alone. Macy's created the combination of Internet and other ad vehicles for its success. And even pure Internet companies agree. The most successful and well-known Internet companies have sought significant publicity in the real world as they've struggled to build their brands. America Online is famous for distributing free disk samples through computer magazines and mail. Yahoo! has recently embarked on an aggressive real-world brand-marketing campaign featuring television and print advertising and a slew of licensing deals from a co-branded Visa card to T-shirt. **CAR TALK.** Internet car seller Autotel.com Inc. goes even further. It has used mostly real-world marketing to build itself into the top car-shopping service on the Net. To woo new customers, it relies on the most traditional of marketing methods: public relations. Anne Benvenuto, Autotel's senior vice-president of marketing, travels the country with her laptop, talking up the site to the media, to Wall Street analysts, to anyone who might talk about car buying to consumers. The company has set up publicity stunts such as giveaways to lure press coverage. "I can't build a brand solely on the Internet. Not yet, anyway," she says. Brand marketing, she adds, must be done even when the consumer is not thinking about buying your product. "The Internet consumer is already thinking about car buying. We also have to plant the seed in the mind of the consumer yet in the market for a car."

That need for real-world brand building may increase as rival Internet companies begin to fight for dominance within product categories. Just look at the bruising battle shaping up between Barnes & Noble Inc. and Amazon. Amazon, like most of the strong Net-based brands, achieved dominance because it was first to offer a high-quality online service. That has created enormous brand equity for the bookseller—but for the first time, it faces a rival with an equally strong brand name and the financial wherewithal and marketing skill to match. Expect Amazon to hammer home its message of superior selection and online knowhow, while Barnes & Noble plays up its authority as the nation's No. 1 bookseller.

The battle of the booksellers has already created fallout. Determined not to get caught in the same bind

Marketing

product that aims to make banner ads and other online marketing tools more visually gripping while still leaving them quick and easy to use, even by consumers with slower modems. But the real anticipation is for the day when



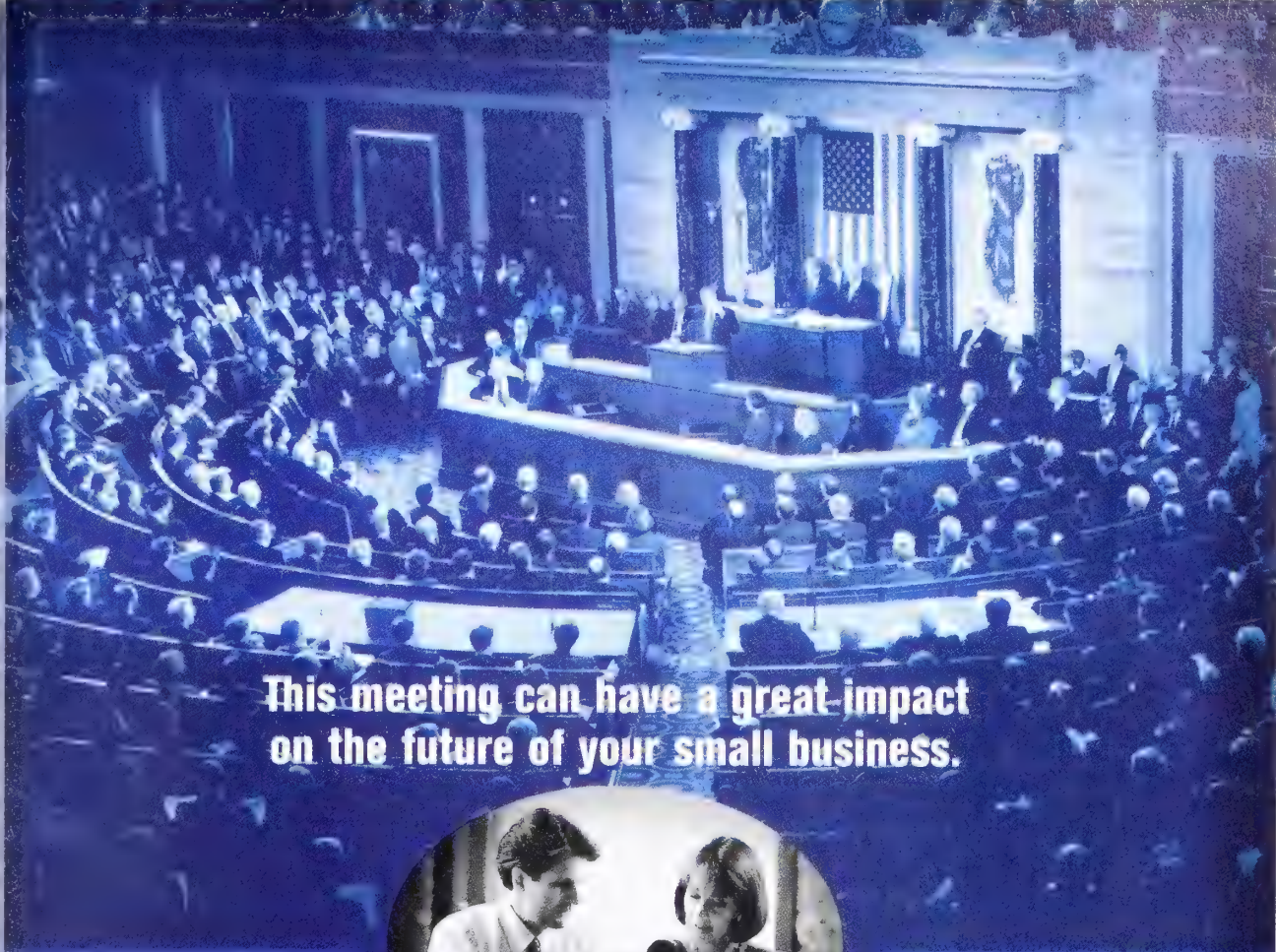
REAL WORLD



VIRTUAL WORLD

TOYS 'R' US

MAKING A LIST. The toymaker fired up an online shopping site in time for this year's holiday rush. The effort was not just aggressive marketing but also a preemptive tactic aimed at staving off cyber-ambushes by small Internet upstarts. The site offers services such as online gift registry and E-mail reminders. Offline, marketing messages in stores and on TV emphasize wide selection and low prices.



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Barnes & Noble, for example, Toys 'R' Us is opening a new online shopping site in time for the holidays. Does the toy giant see visions of huge online profits? Not exactly. The move is at least in part defensive, to counter branding efforts by online upstarts such as tiny eToys. "Barnes & Noble learned it the hard way," says Anderson. "If you are not online, your competition is out there

alone talking to the online customers." That highlights another lesson for marketers. The fact that such heavyweights as Barnes & Noble and Toys 'R' Us are responding to rivals a fraction their size speaks to the leveling power of the Net. If the retailers were competing in the nonvirtual world, the smaller companies would barely register as a threat. That power, the ability to turn up-

start pygmies into mighty amazons most overnight, is what keeps marketers coming back to the Net. Will traditional branding prove the best way harnessing that power? One thing certain: Surfing the Net, whether fun or for business, is going to become an increasingly sponsored experience. *By Ellen Neuborne in New York with Robert D. Hof in San Mateo, California*

CAN I TRY (CLICK) THAT BLOUSE (DRAG) IN BLUE?

Those *Star Trek* replicators that dispense food and clothing on command aren't here yet. But retailers are getting closer. This week, Eddie Bauer Inc., the 78-year-old Seattle-based casual-apparel maker, is testing an online service that lets customers mix and match styles on the computer screen.

It's the latest attempt to build the Bauer brand over the Internet. Visitors to EddieBauer.com will find the same khaki, denim, and knit basics found in the retailer's catalogs and mall stores. But the site is more than just an electronic sales flyer. Want to see how that holiday sweater will look with the khakis? Or maybe try the sports jacket with those plaid pants? Just click and drag in Eddie Bauer's virtual dressing room. "It's fun," says 28-year-old Caly Raduenzel, who tried the service recently at Screenz, a Chicago cybercafe. "I like being able to put the boots and shoes and stuff up there and change the colors."

Since half the consumers who visit the Web site have never before shopped at Eddie Bauer, their expe-

Internet site. "They want to be able to do something."

Besides the virtual dressing room, Bauer offers online customers a reminder service that alerts them by E-mail to upcoming birth dates, anniversaries, and holidays. It lets them create electronic wish lists of products they want friends or relatives to buy for them. And it sends



them targeted E-mail messages offering special sale prices on items, based on their past buying patterns. All offer the online shopper something other catalog giants can't match, says Lauren Freedman, president of e-tailing Group, a Chicago-based consulting group. "They have leveraged technology to do something that can't be done in a traditional retail environment or within a catalog."

These are just the latest refinements. A year ago the retailer offered free software that allowed shoppers to plug in the floor plans for their homes and see how Eddie Bauer furniture looked in the living room or bedroom. This year's Java-driven dressing room is faster and easier, with no software to download. In both instances, the idea is to give online customers more "hands-on" ways to try out its stuff.

Perhaps most important, Eddie Bauer has worked to integrate its Web site, catalog, and stores so that all three supplement one another and boost the overall brand. The Eddie Bauer catalog promotes the online service. The online service lets visitors know they can take products they're unhappy with back to bricks-and-mortar stores. Store cash regis-

ters sport the Web address.

NO BANNERS. But even the coolest Web site isn't worth much if no one knows about it. Besides pitching its online service in its catalogs and stores, Bauer advertises on the Internet—but not with traditional banner ads. It gave banner ads a test run in the fourth quarter of 1997 and again this spring but didn't get much joy. Says Neuman: "They're expensive, and conversion [to sales] is low."

Instead, the retailer is using its Internet advertising to seek customers who are outside its traditional customer base of ca-

sual baby boomers. It boosted its back-to-school push this year by promoting campus gear on popular teen sites such as student.com and dogpile.com. Normally, Bauer doesn't squander ad money on prospects outside its core boomer group. "But that was easy to do, and inexpensive," says Neuman.

The real payoff for Eddie Bauer will come if it builds a base of customers used to shopping at Eddie Bauer online and offline, 24 hours a day, seven days a week. As round-the-clock shopping catches on, Bauer wants to make sure its brand name is leading the way.

By De'Ann Weimer in Chicago

Marketing

ience online is an important first contact with the brand. The company won't release profit and revenue figures for the site, casting it as a marketing tool to lure new customers and keep current shoppers interested. Like other online marketers, Bauer is betting that a potpourri of services will keep those new online customers coming back. "We knew from the beginning that they didn't want to see a poster," says Judy Neuman, who created Eddie Bauer's

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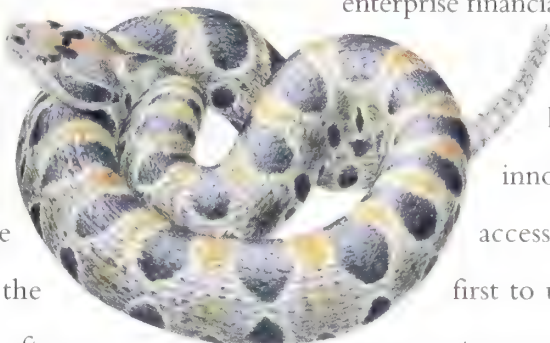


fig. 1



fig. 2

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DANGER IS HIS BUSINESS

Jules Kroll, corporate gumshoe, is empire-building



With his bullet-shaped head and bulldog face, Jules B. Kroll at first glance seems like a twofisted shamus out of a Raymond Chandler or Dashiell Hammett detective yarn. It's an image Kroll has long enjoyed as he built his Kroll Associates into the country's leading private eye agency. But over the past year, Kroll has moved far beyond the corporate investigative work for which he has become so well known.

Affable, low-key, and wearing his trademark suspenders bearing images of palm trees or ancient Greek statues, Kroll, 57, has branched into a wide array of diversified ventures to tap more deeply into the \$4.6 billion global security market. In the process, he has had to learn quickly to manage a much larger and more sprawling organization. "This is quite a challenge," says a characteristically deadpan Kroll.

That's for sure. In December, 1997, Kroll combined his privately held New York-based Kroll Associates Inc. with O'Gara Co., a publicly traded armorer and car maker. The deal gave Kroll access to the public markets, enabling him to spend \$47 million to gobble up a drug testing service, a surveillance-camera company, and an accounting firm specializing in fraud detection. More acquisitions are on the way.

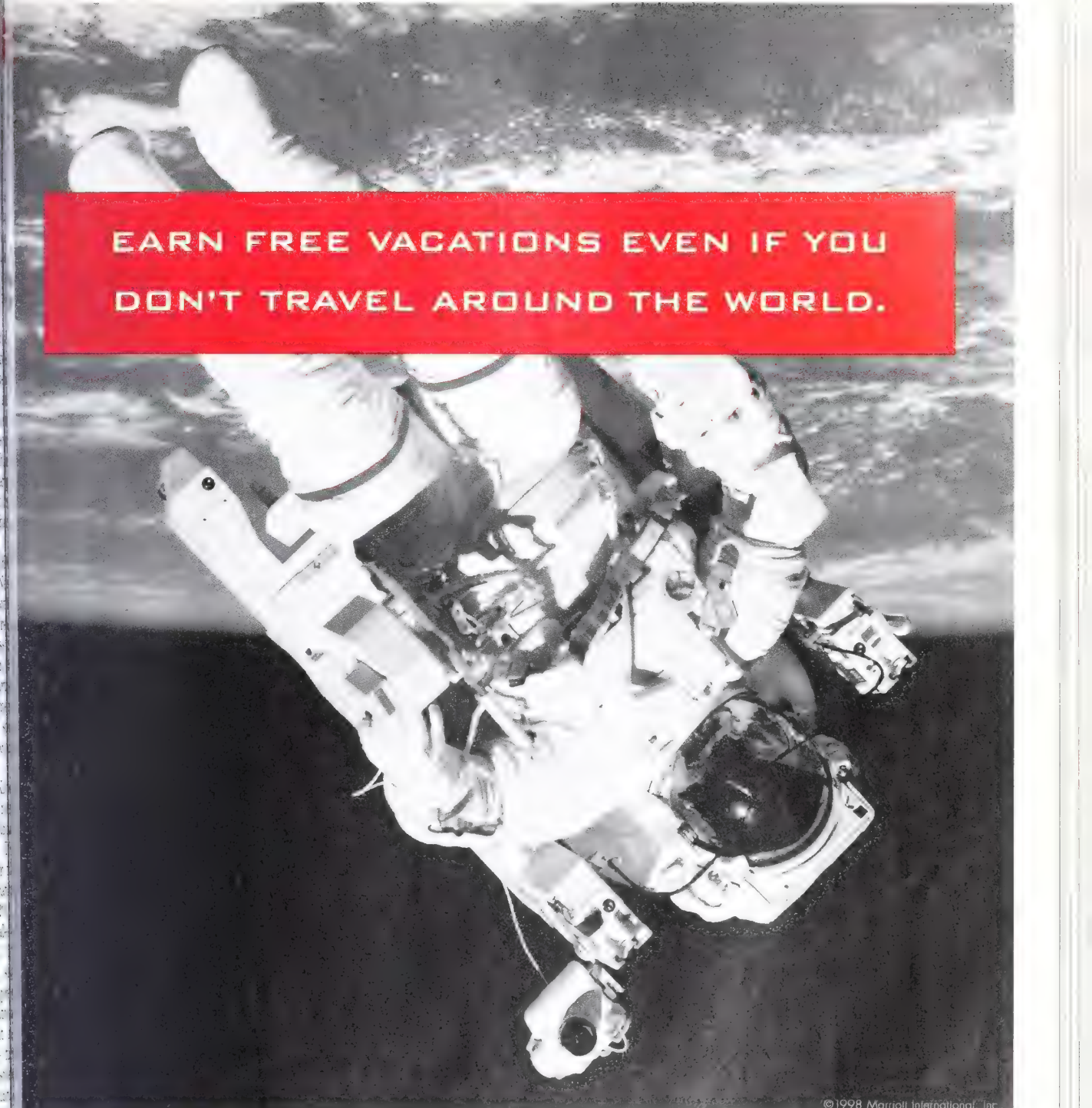
SAFETY FIRST. So far, the new Kroll O'Gara Co. is enjoying boom times, largely thanks to a flare-up in kidnappings and assassinations abroad. The company's stock has doubled over the past year; to 25, while 1998's operating earnings through June 30 soared 42% to \$12.8 million, on \$112 million in sales, 50% of which came from overseas. "It's a dangerous world out there," says Howard I. Smith, executive vice-president of insurer American International Group Inc., Kroll's biggest client and the holder of an 8% stake in the firm. "It's good to have Jules on your side."

Indeed, Kroll is doing all he can to make sure nervous executives know what he can do for them. In early October, he flew to Mexico City, scene of a spate of recent kidnappings, to expand his office and to reassure a gathering of clients that "our mission is to make the world safer." With global terrorism on the rise and corporate executives increasingly the target of crime, Kroll has shown once again his canny knack

spotting opportunity.

DOGGED: These days, Kroll is busy buying up security-related businesses

In the late 1970s, he helped create a market for corporate investigations. A time Manhattan area



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IT A SUITCASE? GOTTA JOIN.  **Marriott** REWARDS SM

Kroll's publicly traded company is booming, thanks in part to a surge in kidnappings and assassinations abroad

tant district attorney, he realized that corporations would pay big for an investigative firm that could dig out employee fraud and other malfeasance. He recruited a savvy coterie of former CIA spies, FBI agents, and prosecutors by paying them as much as twice their public-sector salaries.

But there's more to Kroll's success than waving big paychecks at top talent. He has long inspired loyalty among his staff by remembering the names of even the lowliest clerical workers. He once even lent one promising young investigator the downpayment for his house. The personable Kroll is an avid schmoozer, too. When he nailed down the O'Gara deal last year, he immediately called dozens of staffers. But, recalls longtime associate Joseph R. Rosetti, "he said I was one of three people he was calling. I had to laugh. Jules likes to make you feel special."

Now, the question is whether such folksy management will work at a larger empire. Although it was O'Gara that bought Kroll Associates for \$81 million in stock, Kroll is CEO and chairman of the combined outfit and is its largest shareholder with a 17% stake. "I like running my own business," says Kroll. Wilfred "Bill" O'Gara, formerly O'Gara Co.'s CEO and now Kroll-O'Gara's No. 2 officer, says landing Kroll was worth the demotion. "Yielding authority isn't easy," says O'Gara, whose family owns 16% of the company, "but we wanted Jules."

To learn the O'Gara side of the business, Kroll now spends time hanging out in its armored-car factories in Mexico City and Fairfield, Ohio. He's also traveling the globe to ferret out new acquisitions. And having added employee drug-testing to his portfolio at home, he's looking to move into the lucrative field of background checks for sensitive jobs such as airline pilots.

TIME LAPSES. A marathon worker, he packs his days with a dozen or so meetings at breakfast, lunch, dinner, and in between, then works his five phone lines from his Rye (N. Y.) estate, on the shore of Long Island Sound. His few indulgences include taking his four grown kids on exotic vacations, eating out at pricey restaurants with his wife of three decades, Lynn, and frolicking with his three dogs—Tonka, Twyla, and Thorgrim—on the beach in front of his house.

Kroll has long since given up tracking cases himself, but he retains a bit of

the eccentricity of a private eye from central casting. Back when he started the firm, he quit wearing a watch so he could better focus. He maintains the habit, saying: "I need to concentrate on what I'm doing without the distraction on my wrist." Although his secretary keeps him on time for important meetings with clients, Kroll is often late for staff meetings. "That can tee you off," says Rosetti, a 21-year Kroll veteran. "But what can you do?"

Kroll still exudes the no-holds-barred attitude that long ago won him notice in

THE KROLL FILE

BORN May 18, 1941, Brooklyn, N.Y.

EDUCATION BA, 1963, Cornell University; LLB, Georgetown University Law School, 1966

TOP CASES Tracked down Saddam Hussein's hidden assets. Seized two hotels controlled by scandal-plagued Lincoln Savings & Loan. Probed derivatives fraud at Daiwa Securities. Investigated kickback scheme at Kmart

WHAT HE WEARS Outrageous suspenders

WHAT HE DOESN'T WEAR A watch, often making him late to staff meetings

UNREALIZED AMBITION To hold public office. He lost a bid for New York City Council in 1971

HOME LIFE Wife, Lynn, who helped with clerical work in early days, accompanies him now on his many trips. Four children; the eldest, Jeremy, 27, works in his dad's business

the executive suite. He once saved his client, Avon Products Inc., from a hostile takeover bid by Amway Corp. by unearthing embarrassing details about a top Amway executive's personal finances. Kroll has demonstrated that toughness since his days playing high school basketball in Queens, N. Y. "He was like one of those bulldogs that bites you and never lets go," recalls teammate Paul A. Goldberger, now a New York attorney.

Kroll is much more than a clean-

shaven tough guy in an expensive suit, however. Associates say he has a photographic memory for details, names, and faces. When briefed on a case, he speeds up results by picking out a seemingly peripheral person involved, linking him to some long-ago scandal. "When you hit a wall," says Steven M. Ruch, executive managing director, "Jules will come up with an answer."

Consider the time in 1992 when the Kremlin hired the firm to hunt down government money spirited out of Russia by corrupt officials. In one file Kroll happened to glance at, he spotted the name of an obscure American money manager. Kroll remembered that the financier had been suspected of money laundering years before. His hunch led to a huge stash of hidden assets.

COOL CUSTOMER. Despite his charisma and his knack for remembering names, Kroll flopped at his chosen career—politics. While at Georgetown University School of Law, he worked part-time for Robert F. Kennedy, then a U. S. senator from New York, before heading off to the Manhattan D. A.'s office to handle corruption cases. But when he got the chance to actually run for office, he lost the 1971 primary for New York City Council by a wide margin.

Looking back on the debacle, Kroll sees it as a blessing in disguise. Using his background as a prosecutor, he went into detective work, at first specializing in printing-industry embezzlement scams. His big break came in 1981 when drug wholesaler Foremost-Kesson Inc. (now McKesson Corp.) hired him to investigate Victor Posner, who was then mounting a takeover bid. His findings remain confidential, but the raider backed off and Kroll became a primary to the corporate establishment. Another high-profile job was tracking down Saddam Hussein's hidden assets in the West, which authorities seized.

Even as CEO, his line of work has its perils. When his firm was on the scent of Saddam Hussein, Kroll gathered his wife and kids around a kitchen table and warned them to be on guard for possible attacks. "He doesn't get excited," says son Jeremy, "but we knew there was real cause for concern." That's Jules Kroll: cool, collected, and ready for business—the 1990 answer to Philip Marlowe.

By Larry Light in New York, Elisabeth Malkin in Mexico City

GLOBAL

INFRASTRUCTURE

*New Opportunities and New Risks
in Project Financing*



Illustration by [illegible]

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Collection of the artist.

Risk in Infrastructure Finance

Just one year ago, money was flowing into infrastructure projects all over the world. Although Asia was cruising toward crisis following the devaluation of the Thai baht, the outlook for projects to modernize power, water, and telecommunications infrastructure remained steady. Investors professed faith in the idea that emerging market growth rates, even if weakening, would nurse projects in their infancy and sustain them through the process of eventual implementation.

But this view has been shattered by the financial crises hitting Asia, Latin America, and Russia. While Wall Street continues to believe that the United States and Europe are healthy enough to support infrastructure financings, the economic turmoil nearly everywhere else has thrust the issue of risk back into the center of a sector that recently was viewed as a goldmine by both banks and investors in the public capital markets.

"This is a watershed moment," says Curtis Moulton, managing director of Infrastructure Finance Group at Standard & Poor's Ratings Services. "We are at a unique point in the market where players are starting to recognize that risk needs to be quantified and that information about these projects needs to be made available to all participants in a transaction."

Why? Because infrastructure, by and large, is losing government as its primary sponsor. This holds true for the United States, for Europe, and certainly for emerging economies where governments need private sector capital to build the roads, utilities, and telecom systems necessary to reap the rewards of global capitalism.

The nation's electric power sectors are in the throes of a regulatory revolution. When complete, no longer will government set electric utility rates—the market will. And in the process of doing so, some market players predict that close to a third of the United States' and Europe's generating capacity—300,000 of 800,000 megawatts—will change hands over the next ten years, involving equity and debt financings that could total as much as \$100 billion.

So far this year, about \$6 billion of financing has been done for the United States power sector, and by the time the

transaction backlog for both merchant power plants and utility disaggregations starts flowing, the sector will see about \$16 billion total of financing this year, notes Jacob Worenklein, managing director and head of project finance for the Americas at Societe Generale.

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—Curtis Moulton, managing director of Infrastructure Finance Group at Standard & Poor's Ratings Services

"There is not at all a lack of opportunity in the United States domestic power sector alone," Worenklein says.

Power is one thing. Other infrastructure needs in the United States—roads, bridges, schools—are financed largely by tax-exempt municipal bonds, a market that benefit-

ed in late summer by investors' flight to quality, particularly United States Treasury bonds, which muni prices follow. For example, United States municipal bond funds attracted \$698



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million of cash in the week ending September 3, compared with \$263 million in the prior week, according to AMG Data Services in Arcata, California.

As for emerging markets, the current crisis has halted financing activity. It has also prompted many on Wall Street to reflect on how the post Cold War global economy started booming and whether, in the wake of its first global bust, the approach to project finance needs to change.



"People are going to have to get smart and figure out how to finance for major sponsors of emerging markets projects, which raises the issue of the development of portfolio financings and the development of other forms of diversified pools of financing that make it a little bit easier to finance," Worenklein says.

Infrastructure finance is a complex arena involving the raising of capital based on the project's ability to support associated debt and equity on its own. Both projects and utilities face complicated and myriad risks, including whether the entity being built—whether it be a pipeline, toll road, or power plant—produces the revenues required to pay back investors

once up and operating. Central to project financing is the effort by sponsors to reduce their equity exposure by limiting investors' recourse to the sponsor should the project fail.

This effort to keep a project off a sponsor's balance sheet creates unique risks to investors in project debt and equity. The dependence on the project itself to generate revenues suddenly highlights the importance of the market environment, the technology being implemented, outside guarantees, supply contracts, and sponsors' commitment to the project.

"These are not your typical corporate financings where ongoing companies put their own creditworthiness on the line," says William Chew, managing director in the Infrastructure Finance Group at Standard & Poor's. "Project financings typically have, at best, limited recourse to the balance sheets of the sponsors."

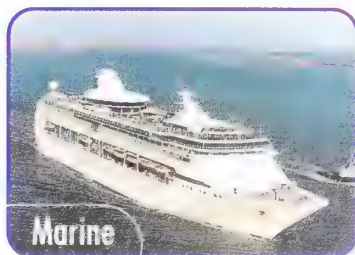
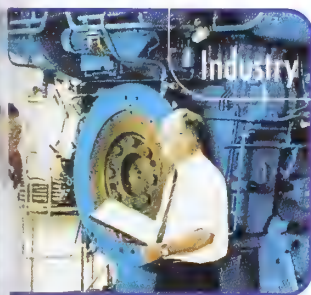
The classic example of a project financing is a power plant. Sponsors of the power project borrow money to build a generation plant. The sponsors contract to supply power to utilities, projecting that the contract revenues will suffice to pay debt service and generate profits. But risks abound. Will the plant actually be built on time? Will the plant work? And will the market value of the contracts pan out so that participants aren't in the red?

Like projects, utilities all over the world face problems. Most profound is the effort to raise rates to levels that more or less equal utilities' costs for providing electricity, an activity that has historically been regulated by government. "In emerging markets, this is a difficult situation even in good times, but in times of economic crisis, it may be well-nigh impossible," Chew says.

For example, the state-owned utilities in Indonesia and Malaysia are having trouble enacting rate increases because of the economic and political turmoil in those countries that has resulted from the Asian financial crisis. In a report issued in March, Standard & Poor's noted that "against the backdrop of near 40% inflation, it is unlikely that the government will increase retail electricity tariffs to levels needed to provide Indonesia's state-owned utility, PT Perusahaan Listrik Negara or PLN, with sufficient liquidity to honor hard currency obligations." Tenaga Nasional Berhad, Malaysia's state-owned utility, has suffered tremendously from the ringgit's loss in value and analysts don't believe the utility will be able to implement regular rate increases for at least two years.

Indeed, the fundamental risks that face all infrastructure projects are compounded in emerging market countries b

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uncertainties, such as inflation, foreign currency risks, legal risks, and sovereign risks. The collapse of the Russian financial system and the Asian crisis have focused the market on the risk exposure of banks, funds, and institutional investors all over the world.

"Liquidity has dried up in project finance in Asia and to a large extent in Latin America," says one investment analyst at a major insurance company who asked not to be identified. "Investors have pulled out, largely because there is an unwillingness to test a government's commitment to a project."

"It's difficult in Latin America because the markets are so volatile right now," says Jane Eddy, managing director and Latin America practice leader for Infrastructure Finance at Standard & Poor's.

This lack of liquidity, some market players believe, marks a crucial moment for project financing—and perhaps all investment sectors—in emerging markets. Indeed, some observers go so far to say that Western investors, who have provided the lion's share of capital to the emerging economies in Asia, eastern Europe, and Latin America, did not value their own money, technology, or knowledge enough when putting it to work overseas. Some believe that this devaluation of capital is a systemic problem of too many middlemen—portfolio managers, financial advisers, and commercial and investment bankers—between investors who are lending money and borrowers who then spend it.

"The respect that capital deserves has been diminished due to inefficient risk assessment and intermediation," says John Laxmi, managing director of project finance at CitiCorp. "The more distance—literally and figuratively—there is between a person's money and the user of that money, the more risk the money is subject to."

There is a fundamental shift at work as well, Chew of Standard & Poor's argues. Lending in project finance, particularly in emerging markets, has long been a direct activity dominated by commercial banks. But in recent years, public, capital markets have opened up themselves to infrastructure debt, injecting infrastructure and bond investors into an unfamiliar arena that poses new risks as well.

"You're seeing a shift to more portfolio-style capital-raising," says Paul Coughlin, managing director and practice leader for Infrastructure Finance in Standard & Poor's Hong Kong office.

The upswing in the infrastructure liquidity cycle was pretty heady, but the downside has clearly arrived. Indeed, sources

say that yield spreads in the sector have expanded anywhere from 300-to-800%. "If a deal came in at 200 basis points off [comparable U.S. Treasuries], it wouldn't be out of the question to see it at 1,400 basis points today," said one market observer. "There is minimal liquidity in Asia and some in Latin America, and even deals in Latin America that were done two weeks ago are now 200 to 300 basis points wider."

In Russia, debt that was sold at a spread of 300 basis points of comparable United States Treasuries is now trading at a spread of 2,000 basis points, an increase of almost 600%.



The halt in liquidity raises questions about whether and how projects started during the boom will survive. After that, the question becomes, what about projects that are in the process of being planned?

"How does one extricate oneself from a situation that we have now where there are a lot of projects in process?" says Amar Battacharya, senior adviser at the World Bank. "These are private sector projects, and it's important to think about how one sets up a balance so that risks that are truly private remain private while at the same time you are creating policy environments that allow in some sense investors not to lose excessively. I think in the end a lot of it therefore is dependent on the early restoration of confidence."

Each party has its own responsibilities and they are synergistic, Battacharya says. "I think one needs to draw lessons fo



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everyone in this," he says. "But it's clear that one point, particularly about Asia, that's worth making is that the structure of financing was particularly problematic because there was just too much reliance on debt—not only debt but bank debt. There weren't adequate levels of longer term debt finance like bonds."

At the same time, amid tremendous market volatility, some strategies may offer solutions to the current risk dilemma. Securitization, for example, an established financing tool in the mortgage and credit card sectors, is starting to be applied to project finance loans and bonds.

In the infrastructure arena, these transactions involve the issuance of bonds that are backed by principal and interest payments from a pool of loans that finance a variety of infrastructure projects. According to Standard & Poor's, the credit strength of the pooled bonds will generally be stronger than the credit strength of any individual loan to the extent that the pooled cash flows diversify the default risk and principal loss potential inherent in the loan making up the pool.

In March, Credit Suisse First Boston structured one of the first collateralized loan obligations backed by project finance loans. Market players believe that securitizations will aid in risk diversification, and with the universe of loans eligible for repackaging at \$50 billion by some experts' estimates, more are very likely on the way. "The potential is substantial," Chew says. "It is the last large type of loan that has not yet been securitized."

"Solutions are being created," Worenklein agrees, adding that in the future, sponsors of infrastructure will probably need to take on more equity in projects and structure transactions so that investors have more recourse to a sponsor in the event of trouble.

"There will be a minuet that will be played here as the major companies in these businesses seek to finance their projects and the banks and capital markets are hesitant, and so there will be, I think, an equilibrium met as supports are provided by the sponsoring companies," Worenklein says. "Sponsors are going



"The more distance—literally and figuratively—there is between a person's money and the user of that money, the more risk the money is subject to."

—John Laxmi, managing director of project finance at CitiCorp

to have to show more corporate commitment, so that their major banks are basically able to look at the financing of their undertakings in those countries as being a support of their major sponsors who are themselves extraordinarily committed to the project."

Battacharya agrees, noting that projects underway that feature more equity are more likely to survive the emerging market crisis. "They'll take a huge hit in the short run, but on the assumption that they are able to withstand this, those with greater equity will do better," he says.

In the meantime, the emerging market crisis has closed the minds of many investors to even solid individual projects in emerging markets. This could prompt a vicious cycle, according to another large, institutional investor who requested anonymity. The double-digit economic growth that was propelling projects in such countries as Thailand, Korea, and Indonesia has declined so much so that the need for infrastructure is no longer intense.

"People in the market are more prepared to make a negative assessment of a project," the investor says. "The perception of risk has risen substantially."

But others argue that with a little time, investors, banks, and other players will return to this

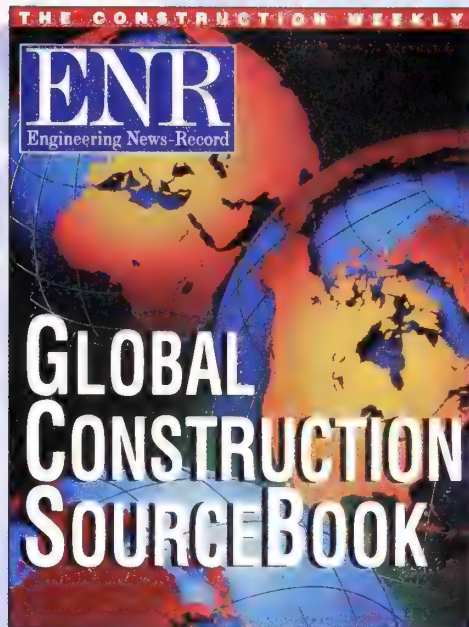
sector—albeit a bit more cautiously. The important thing, market observers say, is to evaluate the risks project by project, country by country. When the smoke clears, true value may be found.

"People may become overly cautious—that's one risk," Battacharya says. "In some sense, the underlying factors that were driving this growth remain in place. At this stage, I think the danger is that long-term investors may react more adversely than is warranted by long-term fundamentals."

"Only the best projects sponsored by the strongest possible sponsors who themselves will have a lot of commitment to the sponsors will get completed, and only in some countries," Worenklein says. "For example, in China, in the Philippines we're seeing some projects move forward, but it's difficult."

Christina Pretto, manager of communications with Standard & Poor's Ratings Group.

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The Entrepreneur's Life page 16



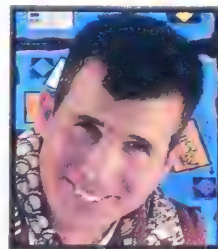
My Dad's Business

As an entrepreneur's daughter, Robin Schatz received an education no B-school could match—a case study in courage, sacrifice, and the risks and rewards in controlling your own destiny

Under 30 page 18

Playing the Game

How to come up with a million-dollar idea—well, half a million—while you're waiting for your girlfriend at the airport



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ROSS PEROT
3.1%

WARREN BUFFETT
5.8%

What business owner wouldn't want a spare pair of expert helping hands? American Express Co. recently invited 448 entrepreneurs to fantasize about who they'd want—if they could have anyone at all—to help run their businesses for a week. It was a write-in poll, so not many personalities earned a high percentage of votes: Bill Gates led with 24%. The next-highest score was for real estate mogul Donald Trump, at 6.8%. Lee Iacocca earned a respectable 5.2%. "Mom" and "Dad" each scored 1.4%, as did First Parents Bill and Hillary Clinton.

PRODS FOR PRODUCTIVITY

Good workers are rare, so small-business owners must maximize employees' productivity. Sprint Corp. polled midlevel managers at 500 companies of 5 to 100 workers on what helps and what hurts.

WHAT PUMPS THEM UP...

What motivates your employees?	
MONEY	35%
PERSONAL SATISFACTION	33
BENEFITS	11
RESPONSIBILITY	11
TIME OFF	10

...AND POUNDS THEM DOWN

What's the greatest obstacle to employee productivity?

FAMILY OR PERSONAL ISSUES	41%
TRAINING LEVEL OF WORKERS	30
LACK OF TECHNICAL KNOWLEDGE	22
OUTDATED TECHNOLOGY	7

WINNING THE SCANNERS

Scanners are popular in small offices, but ones that hook up to a network are pricey. At \$399, Hewlett-Packard Co.'s ScanJet 6200C offers 600-dpi resolution, 36-bit color depth, and easy connectivity—all you'd want in a good small office scanner, but with networking software.

So far, no rival matches the price (800 722-6538).

YOU, TOO, CAN BE A SPECIAL CASE

Even wealthy entrepreneurs can now get special breaks when bidding on government contracts. Since Oct. 1, a change in Small Business Administration policy expands the classification of "small, disadvantaged businesses" (SDBs), which are eligible to win government contracts with bids 10% higher than the lowest bid. Formerly, SDB status was only granted to ethnic minorities. Now, anyone who presents a convincing history of social disadvantage qualifies. One other condition: The owner must be worth less than \$750,000—not counting any equity in a home and business.

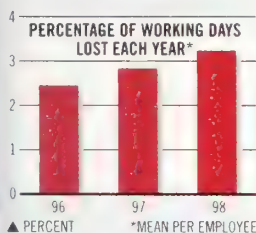
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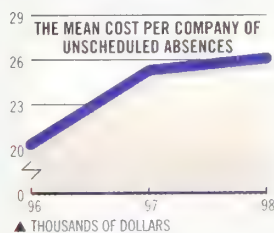
'I WON'T BE IN TODAY ...'

The bad news: Small-business employee absenteeism rose in 1998. The good news: The cost to small firms rose only 3%—far less than for larger ones. In its annual survey on absenteeism, CCH Inc. found unscheduled absences at companies of less than 100 employees up 14% in 1998, vs. 16% in 1997. Family issues, stress, personal illness, and personal needs each cause about 20% of absences. Predictably, stress is a bigger problem for small-business owners than for large employers.

ABSENTEEISM IS RISING...



...AND SO ARE ITS COSTS...



...BUT THE MOST EFFECTIVE COUNTERMEASURES...

AS RANKED BY BUSINESSES WITH LESS THAN 100 EMPLOYEES

1. JOB SHARING
2. FLEX TIME
3. LEAVE FOR SCHOOL EVENTS
4. EMERGENCY CHILD CARE
5. COMPRESSED WORKWEEK

DATA: CCH INC.

...AREN'T MUCH IN EFFECT

	SMALL COMPANIES	ALL COMPANIES
1. JOB SHARING	6%	21%
2. FLEX TIME	25	51
3. LEAVE FOR SCHOOL EVENTS	9	22
4. EMERGENCY CHILD CARE	4	13
5. COMPRESSED WORKWEEK	10	24



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SHORING UP YOUR FINANCES IS A CAPITAL IDEA

Coffers are flush—but maybe not for long. Here's how to enter a downturn in good shape



COVERED: Banks are competing vigorously in the profitable small-business sector right now—as are a host of nonbank lenders

Chand K. Akkineni, president of Capricorn Systems Inc., an eight-year-old information technology company, reads the papers as everyone else does—and he sees storm clouds ahead. But unlike most of his small-business brethren, he's taking steps to protect himself. Thanks to the company's performance in the few years, Akkineni had no trouble obtaining both nonbank and bank financing in addition to the more expensive receivables-based financing he already had. "Next year is going to be tough, but we want to keep growing," he says. "Now, I have other options."

So will other small-business owners be wise. It's a great time to evaluate your company's finances and to shoring up the foundation. At the moment, banks, finance companies,

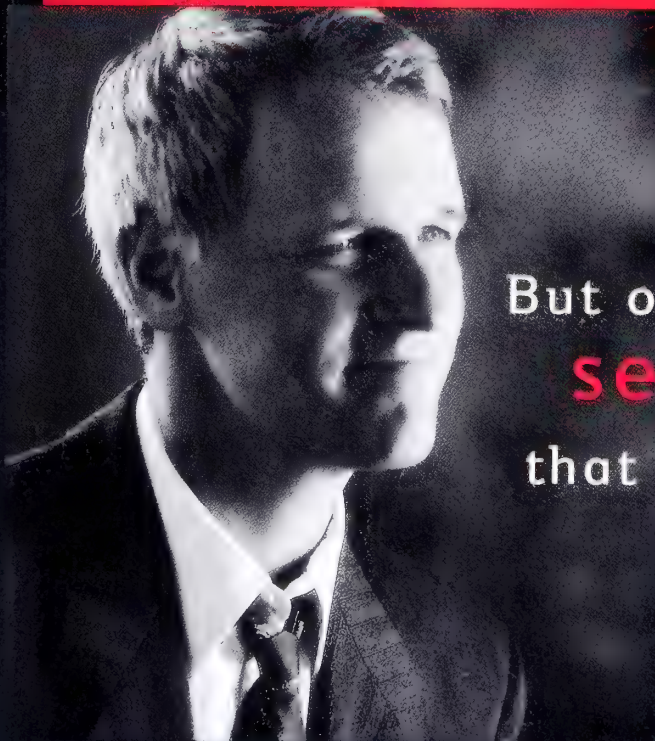
BORROWING

and venture capitalists are still relatively flush. Only 5.7% of 54 banks surveyed by the Federal Reserve in September, for example, tightened standards for small-business loan applications, and about the same percentage raised standards.

Many analysts agree that a recession is a possibility next year—and in that case, credit conditions could get very tight. Thanks to some changes in the banking industry, it's not likely to be as bad as the steep recession of the early 1980s. Still, experts say the best time to take preventive steps is when you don't actually need them. "While time is good, you have an opportunity to get your financial house in order," says Sandy Maltby, head of small business services for KeyCorp, a Cleveland bank.

Start by reviewing your credit record, with an eye toward conserving cash. Consider how much your profits will decline in a downturn, for example, and see whether you would have the cash to cover interest payments. If you don't, you should be looking for ways to pay down that debt now; if you're not worried, you still might want to take a long-term loan at today's low rates.

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The time is ripe because, at this point, small businesses have few worries about arranging financing. KeyCorp and Wells Fargo & Co., with large portfolios of small-business loans, say they have no plans to cut back. "I've not seen any tightening of credit in the last six months," says Michael R. James, executive vice-president in charge of small-business banking at Wells. Both banks say that they have not imposed more stringent lending conditions or increased their rates to compensate for any perceived increase in risk.

Granted, caution is rising. Some banks have cut their exposure to small companies doing business overseas. And Wells Fargo's James says he expects some overly aggressive lenders to pull back. But even if there is a recession, the effect on the banking sector may be less severe than the 1990-91 experience. Last time, the slowdown was accompanied by new loan review standards stemming from the savings and loan crisis and increased capital requirements for business loans. Since then, the loan review standards have been modified to allow banks to increase their small business lending. Besides, in a recession, the Small Business Administration would increase its guarantees on loans, as it did the last time around. In fiscal 1992, SBA-guaranteed loans grew some 34%, to \$5.93 billion.

Overall, says Jere W. Glover, chief counsel for advocacy at the SBA, small businesses should face fairly accommodative conditions until the bitter end of a recession. That's because banks are competing more vigorously in this market segment—especially for the smallest loans. "The banks have found this to be a very profitable area to do business," he says. **COLLAPSE.** When bank loans don't offer enough, nonbanks, including commercial finance companies, equipment and real estate lenders, and financial-services giants such as American Express Co. and Merrill Lynch & Co., offer alternatives. Nonbank lenders gained share in small-business lending in the last recession and now account for some 7% of all lines of credit, 67% of equipment leasing transactions, and 61% of business credit-card loans, according to Financial Institutions Consulting in New York. They are sure to grab even more market share in the next downturn. "Commer-

cial finance companies tend to do well when banks become risk-averse and pull back," says Samuel L. Eichenfield, CEO of Finova Group Inc. in Phoenix.

Of course, entrepreneurs in the unfortunate position of just starting out as the world economy collapses are probably already experiencing financing difficulties. It will be harder for entrepreneurs to get financing from family members who have suffered stock market losses, for instance. "The friends-and-family money is going to be somewhat less," says David Wiesen, a New Jersey consultant. Around 30% of small businesses rely on this source for at least some startup funding.

DON'T JUST SIT THERE

No one can be sure a downturn is coming, but now is a good time to prepare. Here are some steps the experts recommend:

GET A GRIP Review your financing structure and business plan. Make sure both can survive a recession. Check for clauses in your bank line of credit that might permit termination in a downturn, and consider renegotiating the loan or finding other financing.

THINK CONSERVATIVELY Make cash production a priority and build up a cash reserve. If you have too much debt on your balance sheet, use some cash to pay down debt.

DON'T WAIT If you're planning new financing, wrap it up now while terms are easy and rates low. You should also think about refinancing old debt to take advantage of these conditions.

STRETCH OUT Replace shorter-term debt with longer maturities. Consider borrowing against real estate to get a 20- to 25-year maturity loan. Make sure to match loan maturities with equipment payment schedules rather than relying on lines of credit.

Similarly, angel investors—individual venture capitalists—are likely to be less available if they are nursing wounded stock portfolios. Marci Zaroff, president of Under the Canopy, a one-year-old catalog distributor marketing upscale, environmentally responsible merchandise, recently lost financing from an angel after having used up \$500,000 of personal savings and available credit-card financing. A business owner himself, the angel backed out from a planned \$2 million stake in the Randolph (N.J.) company when "his own stock crashed," says Zaroff. She's talking to a factoring company about financing her receivables, but continues to look for a long-term investor.

Venture-capital firms, meanwhile, have more dollars than ever to invest.

In the first half of this year, venture partnerships raised some \$8.2 billion, record amount, according to Venture Economics in Newark, N.J.—adding the uninvested assets raised previously. **DEFERRED IPOs.** The funds are putting their money to work as fast as they can, investing at least an estimated \$1 billion in the first nine months of '98, the way to surpassing last year's record, says Pricewaterhouse Coopers. They expected to continue to do so even if the economy stumbles. "There's just so much money in this industry to sit on," says Fred Beste, managing partner, Mid-Atlantic Venture Funds in Bethlehem, Pa. Before the last recession, venture funds were much skinnier and practically dried up.

For companies seeking venture financing, however, terms will change. Valuations will drop to reflect the lull in the stock market, since so many venture capitalists cash out by taking their companies public. And entrepreneurs will have to give up more equity than they would have a few months ago for the same investment.

Of course, those companies that had their hearts set on going public will have to wait. Icarus Corp., a Rockville, Md. software developer, is a candidate for an initial public offering. The 29-year-old company has been profitable for years, with more than \$9 million in annual revenues, is a growth business and carries no debt. Last July, it planned to issue 2 million shares at around \$8 apiece. But a sluggish market for small-cap stocks deterred, co-underwriters La

Global Securities Inc. and Breedlove & Wesneski & Co. pulled out of the offering. CEO Herbert G. Blecker is curbing growth to adding debt and diluting equity.

Companies unable to fulfill IPO dreams turn to bank lines of credit or private equity investors—or, as a last resort, merge with a competitor. "We are talking down with every one of our clients to consider how much capital they need and their financing alternatives," says Michael J. Kollender, an investment banker at Josephthal & Co. in New York. Sounds like a good idea for any business owner.

By Hilary Rosenberg in New York

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ROCKING THEIR WALLET

Skip Maggiora's program puts boomers in bands—and the sweet sound of sales follows

They're popping up all over the country—rock 'n' roll bands with names like Prematurely Gray, Average White Collar Band, and Pipedream. Some play for a few weeks and break up; others keep going with a string of local gigs. They're boomer bands, 40- to 50-year old guys—at least they're mostly guys—getting together to jam before a live audience and, perhaps, fleetingly relive their youth.

These retro groups aren't the product of spontaneous generation, though. They're the brainchild of Skip Maggiora, a 50-year-old ex-rocker who owns Skip's Music in Sacramento, Calif., whose program has been licensed nationally. He was the first to put the amateurs together—and equip them, too. His idea? Make it irresistibly easy for wannabes

who gave up their guitars and drums in the '60s and '70s to take up music again. Then, if they get hooked, they'll buy the gear they always wanted but couldn't afford as teenagers—presumably at Skip's. It's a clever marketing approach with implications for any industry seeking to attract new demographic groups.

RETAILING

Maggiora has dubbed his program Weekend Warriors. For \$75 per player, the store puts warriors into a band and provides instruments, a professional coach, and a soundstage for four once-a-week rehearsals. In the fifth week, Maggiora organizes a concert with four to six bands at a local hotel lounge and prints up tickets for band members to give friends and family. "We become their roadies; we tune their guitars for them,"

says Maggiora, a roadie himself. Johnny Winter at Woodstock. "That's the stars for the night."

Take Sacramento trial attorney Q. Brown, 48. From 1963 to 1966, he played in a Sacramento band called Prophets, which opened for such forgotten acts as Grass Roots, Southern Camel, and Harpers Bizarre. Then college intervened. He hadn't played more than a few licks in 25 years. Now he does rhythm guitar and vocals in a group called Four Lawyers and a Lawyer. "But for Skip having everything set up, I would never have done it again," he says. That's been good for Maggiora: Brown bought a guitar and amp. The band got an electric piano.

A few of the warriors actually make some money. Auburn (Calif.) veteran of an Auburn H. La Rue's band, Las

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Marketing

Rue and the Love Slaves, recently landed its first paying gig, a company party. La Rue, 40, says "acting out the fantasy" is the real fun of it, though. Maggiora furthers the cause with perks like laminated backstage passes that prominently state "artist."

Maggiora dreamed up Weekend Warriors five years ago after his store staged a 20th anniversary bash. "So many guys in coats and ties stopped by to say, 'I used to be a customer,'" he says. Those early patrons had vanished one by one as dreams of rock stardom gave way to the harsh realities of real jobs and raising families. Now, their kids—the echo boomers—were driving the store's growing sales. What Maggiora wanted to do was lure back the parents—and their fatter wallets. But it had to be easy, promise fun, and most of all, connect them to their love of music. He points to the golf course across from his store: The pro shop can sell expensive clubs because there's a course to use them on. "Selling them a guitar doesn't keep them involved," he says. "Giving them something to do with it is what's bringing them back."

So Weekend Warriors—which helped boost Maggiora's revenues from about \$6 million in 1993 to more than \$9 million last year—is designed to address its target customers' concerns. "I don't have an instrument": It provides one. "The sound police won't allow it": There's a state-of-the-art place to rehearse. "I don't have the time": It's two hours once a week, and the fifth week you're on stage. "I'm not good enough": All Maggiora says to that, rolling his eyes, is: "It doesn't take a lot of finesse to play *Louie Louie*."

STARTUP KIT. Now, Weekend Warriors is spreading. The International Music Products Assn., a trade group of retailers and manufacturers, licensed the program from Maggiora for a nominal fee. For \$75, association members use the Warriors name and receive a startup kit that includes a promotional video, point-of-purchase displays, and brochures. After two years of tests at selected retailers,

the association began its national roll earlier this year. Now, 135 stores boast active programs, and about 50 more plan to launch them.

With U.S. instrument sales growing 5.6% last year, to \$6.1 billion, retailers are far from desperate, and reviews of the program are mixed. Some small stores have complained that unless they flesh out the bands with their own staffers, they can't assemble enough bands to stage a decent concert. Other say renting a venue is too expensive.

True, the program is time-consuming and barely breaks even. But most store owners see a payoff. "More than I end up buying something," says Paul

E. Volpe Jr., with his father, in South Shore Music, Weymouth, Mass. John R. McMurry, owner of McMurry Music Center in St. Louis, says that rather than a loss, he has a waiting list of about 150 players. On average, he estimates, each band spent around \$1,000 in the store. Robert A. Marin, who owns American Music in Seattle, says that unlike his average customer, who would spend a \$200 to \$300 on an instrument, a Weekend Warrior spends \$700 to \$2,000 on a new guitar. On Maggiora's custom-

A SOUND PLAN

The nationally licensed Weekend Warriors program is helping music stores boost sales.

THE OBJECTIVE Rekindle aging boomers' interest in buying musical instruments

THE STRATEGY Music stores create a rock 'n' roll fantasy by putting together bands and giving them a venue to perform

THE DEAL Provide instruments, soundstage, roadies, coach, and accoutrements such as backstage passes and tickets for four rehearsals and a concert

THE HOOK The cost is just \$75 per band member, but each band generates an average of \$1,500 in instrument sales—for starters

spent \$30,000 on music and studio time. More important, the boomers are bringing in their friends. (Says Maggiora: "Don't forget, Four Lawyers and a Rice Farmer started with one lawyer.") A third of Maggiora's customers are now his age. Some, in fact, are just covering their dreams. "I'd be there to predict where this will go," says Michael H. Barosso, 48, of Pleasant Grove, Calif. When he's on stage with his clean-cut colleagues, you can find him by the ponytail and the vintage Lundberg Rice baseball cap. "But I got ambitions beyond Weekend Warriors," he says. He's investing in his dreams, too, with four basses and an amp bought at Skip's Music. As for Maggiora, he is concerned, Barosso is ready a star.

By Larry Armstrong in Los Angeles



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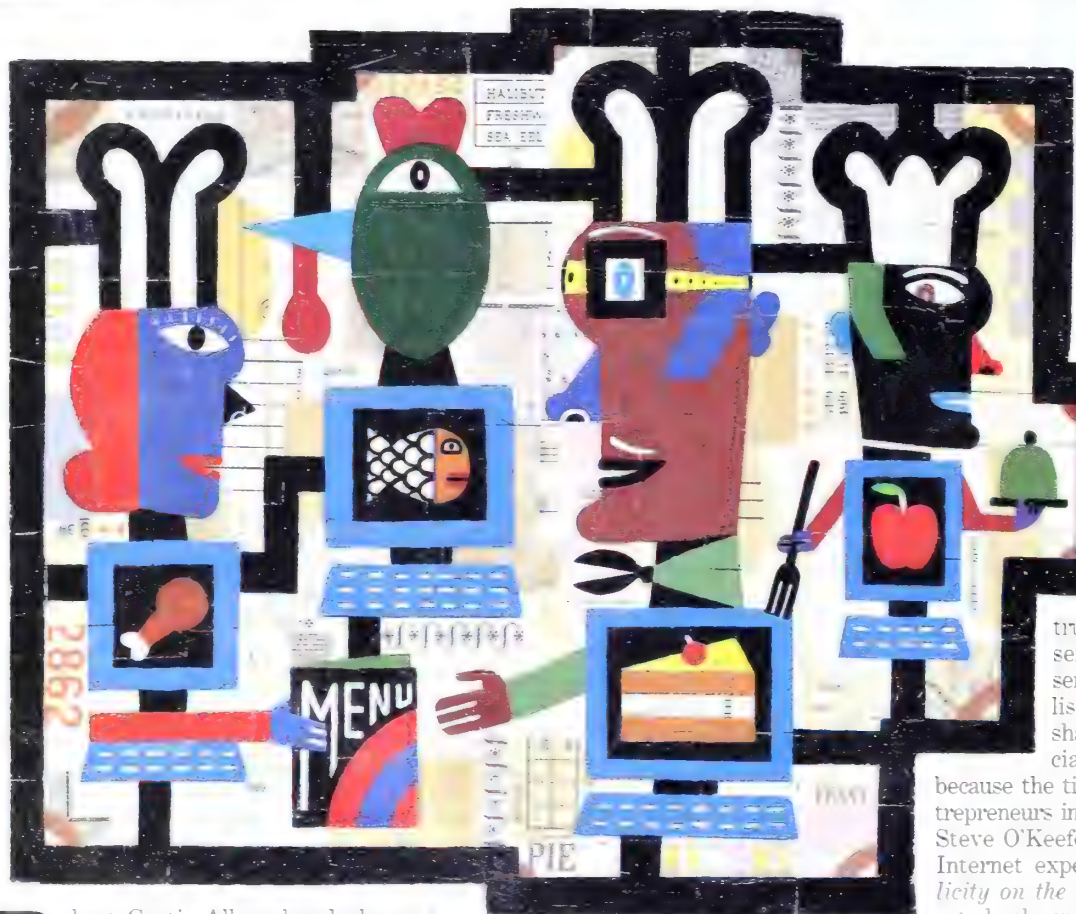
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GETTING COLLEGIAL ON THE NET

E-mail lists, while less flashy than Web sites, are rich in industry-specific information



Robert Curtis Allen already knew plenty about pipes and drains when he bought his father's Houston-based Allen Plumbing Co. in 1989. But it wasn't long before he realized how little he knew about pricing and marketing. To help educate himself, Allen, an early and avid user of America Online, teamed up with a fellow plumber and cyberbuddy, Kathy Love of West Columbia, S.C., to start the Plumbers Discussion List in 1995.

The Plumbers List is just one of hundreds of E-mail discussion groups, also called listserves, that are proliferating in cyberspace on almost every imaginable topic. Members with a common interest sign up for the lists by E-mail, then exchange ideas, make comments, and

ask each other questions by sending E-mail messages, called "posts," to a central server. The messages are either automatically sent to all the list members or screened first by a moderator. Members usually learn about a given list by word of mouth or discover it on a Web-based directory, such as Liszt (www.liszt.com), where they search for lists sorted by topic, read list descriptions, and get directions for subscribing (table, page ENT 14).

In Allen's case, trading business tips, product reviews, and industry gossip on the 420-member Plumbers List really paid off. Marketing suggestions from other plumbers helped boost gross

sales 40% in the first year and the next, he says. He learned about a better way to price services, too. "I wouldn't be driving this new truck today if it weren't for the Plumbers List," he adds.

Sure, Web sites receive most of the buzz. But e-mail discussion lists are one of the Net's best-kept secrets—least-known resources for businesses. Combining much of the combination of

trust, support group, service, and professional seminar. "Online discussion lists are invaluable for sharing information, especially for entrepreneurs

because the tips come from fellow entrepreneurs in the trenches," observes Steve O'Keefe, a New Orleans-based Internet expert and author of *Publicity on the Internet* and the syndicated column "Online Marketing

SPAM-PROOF. For convenience, lists beat out their closest cousin, the Us newsgroups—Net-based bulletin boards. They're also far less prone to bloated marketing pitches, or "spam," because many lists have rules prohibiting commercial communication. E-mail lists can be more efficient than a live online chat or phone call, giving you time to craft responses carefully. Also, you can archive or print out messages for reference.

For many entrepreneurs, discussion lists are potent marketing tools. Although direct sales pitches are a no-no, posting to a list allows you to show off your expertise and let potential customers

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The Internet

to know you and your company's services. Lorilyn Bailey quit her day job last April to focus on building her Lormax Communications, which publishes self-help books and provides experts for media interviews. She says about 75% of her clients learned about her through the informative posts she makes to the Publishers Marketing Assn. list, consisting of fellow publishers. Posting "gave people an opportunity to know me and trust me," she says. "I would not be in business if it weren't for that group."

Other business owners join lists for help answering specific business or technical questions. Sandra Jacobs, business-development manager for 160-employee Telescan Inc., a financial-services information firm in Houston, needed help handling big clients who are slow to pay. Members of the Internet Sales Moderated Discussion List, which discusses how to sell products and services online, offered concrete, useful advice. "You see how other people dealt with the same situation you have," she says.

NARROW FOCUS. E-mail discussion groups cover just about every subject under the sun, from accounting to zoology. A recent perusal of Liszt turned up 178 business lists, 298 culture lists, and 366 recreation lists. Some business lists are general, such as TalkBiz, while others focus narrowly, such as Can-AccTech, where Canadian accountants discuss software tips.

Business owners who use lists tend to subscribe to more than one. Julia Lyons-Wood, 30, whose year-old Calgary-based Investigative Marketing Services does consumer research in the U.S. and Canada, subscribes to five different lists, including Women Talk Business for general business topics and Market Think Digest, which discusses marketing.

Lists also vary in tone and purpose. Some are chatty and friendly; some are bare-bones and technical; others tend toward the philosophical. There are small private lists—for a company's board members or a single college class, for example—and huge public lists, like the 85,000-member LinkExchange list, which discusses Internet marketing.

Discussion lists can ease the isolation of home-based and solo practitioners. Bailey, who recently moved to Raleigh, N.C., from Rochester, N.Y., and works at home, finds the publisher's list helps make up for her limited social network: "The list is like the water cooler: You share jokes, you gossip."

In a crisis, list members sometimes give comforting moral support. Last summer, herb grower Lucinda Jenkins saw her Glenbrook Farm threatened by fires raging through Suwannee County, Fla. Distraught, she turned to the Business Women Connected list, writing: "My heart is in my throat as I look out the window." Replies came immediately: "Our prayers are with you," said one. Soon, rain broke over Suwannee County, and, Jenkins says, "It felt like divine intervention."

How do you find a list that's right

LISTSERVES AT YOUR SERVICE

Resources for finding and using E-mail discussion lists

DIRECTORIES

These sites all offer keyword searches, helpful tips, and sign-up directions for lists, with slight differences

WWW.LISZT.COM The leader, with over 90,000 lists

CATALOG.COM/VIVIAN/INTEREST-GROUP-SEARCH.HTML Also indexes list software programs and hosting services

WWW.NEOSOFT.COM/INTERNET/PAML Good descriptions of list content

WWW.LSOFT.COM Searchable by country of origin

OTHER RESOURCES

WWW.INTERNETADVERTISING.ORG/RESOURCES/EMAILMANAGEMENT.HTML A useful article on how to manage heavy E-mail traffic

WWW.TIPWORLD.COM Its free E-zines include E-mail Mailing List of the Day

WWW.MMGCO.COM/ALIST A software program that links to the "100 Best" free lists

WWW.TNTECH.EDU/WWW/ACAD/HIST/LISTS.HTML Several linked pages on the history of lists

for you? For starters, go to one of the list directories. Peruse the lists by category or plug in a topic, such as "knitting" or "E-commerce," and see what comes up. After following directions to subscribe, you'll usually receive a "welcome" message explaining list rules and how to "unsubscribe" if you change your mind. Be sure to save this message. Take a few days just to "lurk" on the list, getting a feel for the group. Then post a message and wait for the responses.

The biggest problem with joining lists is managing the influx of E-mail. Some high-volume lists let you subscribe to

a digest version, which delivers a tire day's (or week's) posts in one mail message. Also, most E-mail programs have filters that can be set to delete E-mail automatically or file into folders, according to sender, subject, or other criteria. If you still feel overwhelmed, set up a separate E-mail account to receive list posts at a service such as Yahoo! or Hotmail.

While spam is usually taboo, not all lists let you subtly promote your business by signing off with a so-called signature, or sig, file. It usually includes contact information, a Web-site address, and maybe a brief business description so list members get to know you are and how to find you.

TIME TRAP? What's sometimes better than joining a list? Starting one your own. A moderator who appears in a list every day gets an extra measure of credibility. Adam Boettger says that running the list Internet Marketing has brought some \$500,000 of business to Portland (Ore.)-based Internet advertising firm eyescapes interactive inc., where he is vice president of business development.

To start your own list, you'll need list-management software and a Web site on a server, available from such companies as L-Soft International Inc., Landover, Md., or SparkNET Interactive in Green Bay, Wis. Majordomo, a free listserve program, is distributed by Great Circle Associates Inc., Mountain View, Calif. Some companies offer free hosting as well as without service and support. Be warned: Moderating a high-volume list can be time-consuming. It's Boettger, who moderates the Internet Marketing list, about two hours a day to screen about 300 E-mail messages.

Otherwise, hosting services cost from as little as \$10 per month for low-volume noncommercial lists to as much as \$1,000 per month for a huge commercial list with management bells and whistles. Some companies use sponsors to help defray the cost, while others consider it a marketing expense.

So, for a new perspective on the look no further than your E-mail. Whether you own a list or join someone else's, it could be just the boost your business needs. You might even be like plumber Allen—flush.

By Edith Hill Updike in New York

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BY ROBIN D. SCHATZ

DAD'S BUSINESS

An entrepreneur's child gets a unique education—with an emphasis on courage and patience

When I was 12, my parents told me I had to quit taking piano lessons. My father was starting his own business, and music, like steak and summer camp, became an expendable luxury. I protested faintly, but my father, who played beautifully by ear without the benefit of lessons, was clearly more pained than I.

Harold J. Schatz was 44—with two daughters and a mortgage on a split-level—when he left his job as an engineer and sales manager at a manufacturing company in northern New Jersey in the mid-1960s. He and three co-workers scraped together \$55,000 to open Industrial Microwave Corp. in Scotch Plains, N.J. Over two decades, it would grow from four guys and a secretary to 120 employees and about \$5 million in sales. As subcontractors to major corporations, they made microwave components used on missiles, aircraft, and even two lunar antennas.

"TOO DUMB." Lately, I've been pondering my father's life as an entrepreneur and the impact it had on our family through the bifocal lenses of a parent and small-business editor. I marvel at his taking the chance, starting with no written plan and inadequate capital. (It's certainly not what we'd advise our readers.) He chalks it up to optimism and naivete. "I was too dumb to see the risks," he says now. "I never thought, What if we didn't get business? If I had looked at the downside, I would've been too scared."

The seeds of entrepreneurship were planted in my father's childhood. My grandfather, Jacob Schatz, owned a silk mill in Paterson, N.J., which thrived through the '20s. Although it failed during the Depression, it left my father with a positive impression: "The pride and individuality of owning your own business always stuck with

me," he says. My father, who spent 20 years working for others, never felt compelled to make the leap himself until his longtime boss took the company public and started "listening to other people rather than himself."

I never questioned his decision. It was just our life. During Industrial Microwave's first nine months, the partners drew no salary, and my mother found myriad ways to cook ground beef. Just two years later, the business was doing well enough for my parents to risk buying a more expensive home. It wasn't

easy, though. My father worked long hours and traveled a lot. Often, he clashed with some of his partners.

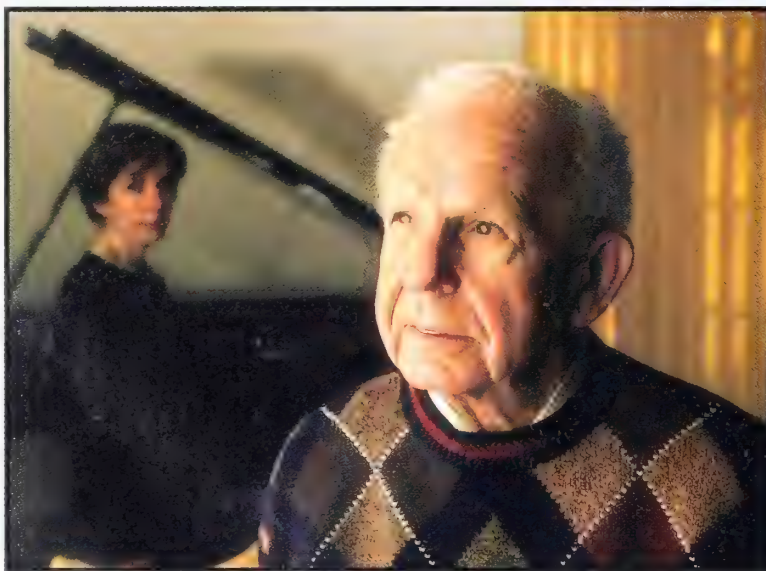
As I got older, I often typed and filed for my father, loved watching him at his sleek walnut desk. There, he fretted about making payroll and fulfilling orders, but he also seemed powerful and proud. Owning a business, I saw, was demanding and seldom glamorous—but the independence meant nobody could limit your potential.

As an entrepreneurial household, we suffered the

economy's hiccups more deeply than other families. During one recession, sales slipped so dangerously that two partners skittishly took buy-outs. To help out, my mother briefly went to work at Bloomingdale's, her first job since my birth.

Around 1976, my father bought out his last partner and was finally able to run things his way. The business prospered. He sold it some years later at its peak.

It never occurred to any of us that my sister or I should risk this gritty business



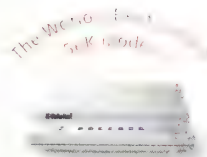
SCHATZ AND SCHATZ: No piano lessons, but plenty of others

after finishing college. Entrepreneurship had no cachet back then, and I wanted to be a writer. While I was proud of my father's accomplishments, I'm grateful that he expected me to make my own choices. I take to heart now the underlying message of his bold midlife move—that neither age nor circumstance need limit or define me. I hope to teach my children that, too.

I still regret giving up piano lessons, but it was a small sacrifice, really. In truth, the piano of my childhood was always waiting there. It now sits in my living room, challenging me to take up what was long ago abandoned. As Dad taught me, it's never too late.

Schatz, a small-business editor, can be reached at Robin.Schatz@businessweek.com.

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To Eric Poses, 25, life is a game—for teens and adults. It's called Loaded Questions, and so far he has sold about 38,000 copies, generating some \$500,000 in revenue for his All Things Equal Inc. in Miami.

Poses came up with the idea for the game two years ago while waiting for a girlfriend at Miami Airport and wondering what they would talk about. The point of Loaded Questions, you see, is for people to find out how well they know each other. Players advance on a board by correctly identifying which opponent gave a particular answer to revealing questions: "If you were forced to choose your own death, how would you die?" or "What is your favorite cliché?"

Poses was working for a Miami ad agency at the time and hating it. "I wasn't made to have a job," he says. He was, however, born to the world of games: His grandfather and great-uncle were co-creators of TV game shows

Playing The Game

POSES PASSES 'GO' AND COLLECTS \$500,000

games and drove 13,000 miles visiting independent toy and game stores to answer his own loaded question: How would you feel if you blew \$60,000 in personal savings and your parent's money on a game no one wanted?

"Cold-calling takes guts," says Sara Pierce, owner of Philadelphia's Einstein Presents Inc., where the game has sold well. Last November, Poses started to score: Toys 'R' Us ordered 6,000 units for selected stores at Christmas. This year, the chain bought 20,000 for all its stores. No need to ask Poses this one, from the Personal category: "What was your most gratifying moment?"

By Fred Strasser in New York



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LOOK WHO'S THAWING ON GLOBAL WARMING

Group of U.S. businesses—some seeing a chance for profits—is advocating action



For years, U.S. energy and utility execs had a simple and direct response to the threat of global warming: Rubbish! There's no evidence, they said, that emissions from burning of fossil fuels are raising earth's temperature. And trying to hose emissions—the goal of an international treaty hammered out last summer in Kyoto—would cripple the American economy.

Not every exec came to the same conclusion, however. American Electric Power Co. CEO E. Linn Draper and his environment chief, Dale E. Heydlauff, led over the evidence—including record temperatures in recent months—decided that human-caused global warming was the most likely explanation. "It's no longer possible to say there's not a problem," says Heydlauff.

Earlier this year, Draper broke ranks with the hard-line industry position. In 1997, AEP joined Boeing, Enron, Lockheed Martin, 3M, United Technologies, and seven other companies as founding members of the Pew Center on Global

Climate Change, formed to search for ways to prevent global warming. When AEP signed on, the reaction of fellow utility execs ranged "from shocked and confused to pretty vitriolic," recalls Heydlauff. But now they are "saying maybe we're on to something."

The willingness of AEP and other such companies to take a fresh look at the issues is an important change that offers hope for resolving the current impasse over the Kyoto climate treaty. Delegates from some 165 nations will gather in Buenos Aires on Nov. 2 to begin tackling the vast unresolved issues in the Kyoto Protocol (table, page 104).

"We potentially have a very serious problem," says FMC CEO Robert Burt

SCORCHED EARTH: *This summer's heat took a toll on crops in Texas*

Final decisions are not expected in Buenos Aires, but pressure to take action is growing. "Science has told us we potentially have a very serious problem," says Robert N. Burt, CEO of chemical and equipment giant FMC Corp. The evidence includes record-high global temperatures in recent years and computer models that forecast a warming of 2 to 5 degrees Fahrenheit by 2100.

LOGJAM. The central issue in the Buenos Aires talks will be whether developing countries should commit to emissions reductions—and when. The Kyoto treaty requires developed countries to cut their greenhouse gas emissions below 1990 levels by 2008-12. The U.S.'s target is a 7% cut. But the protocol puts no limits on the amounts of gases such nations as China, Korea, and Mexico can spew into the atmosphere. For that reason, Republicans in Congress say the Kyoto Protocol is grossly unfair. Last year, the Senate passed a resolution saying that

THE HURDLES IN BUENOS AIRES

As delegates from around the world try to find a way to reduce the threat of global warming, here are some of the thorny issues they must resolve:

"MEANINGFUL PARTICIPATION" BY DEVELOPING COUNTRIES The U.S. won't agree to cut its emissions unless developing nations like China and India also agree to limits. Not fair, developing countries retort: Industrial nations are mainly responsible for the problem, so they must act first.

"HOT AIR" TRADING The Clinton Administration figures the U.S. could meet most of the negotiated emissions limits by buying emissions "credits" from Russia and Ukraine (whose economies and emissions have tanked since 1990) rather than actually cutting emissions at home. That's cheating, says the rest of the world. The European Union wants to require that at least 50% of reductions occur at home.

CREDITING CO₂ REMOVAL In addition to reducing emissions of greenhouse gases, concentrations of CO₂ can be cut by removing the gas from the atmosphere by, for instance, growing more trees or crops. But figuring out how much credit countries will get from such measures is a delicate issue.

"CLEAN" DEVELOPMENT The developing nations want the industrialized world to help them adopt energy-efficient, clean technologies. But they fear the U.S. will hold back until developing countries agree to measures such as emissions caps.

without developing country commitment, the treaty is dead.

Developing countries aren't ready to sign on. The current climate threat is the legacy of decades of emissions from the industrialized world, they argue. "Commitment is a dirty word in the developing world, and noncommitment is a dirty word in the developed world," says Atiq Rahman, director of the Bangladesh Center for Advanced Studies. "We have to break this logjam."

One way to do that would be to recognize steps countries are already taking. Cuts in subsidies for fossil-fuel energy in China, India, Mexico, and other nations have slowed the rise in emissions, says a new study from Washington's World Resources Institute. Meanwhile, Brazil has made a major push to use renewable fuels. Uruguay is reforesting 700,000 acres, and India is becoming a leader in wind power.

"CHANGE IS NOT FREE." Negotiators in Buenos Aires also are encouraged by recent developments in Europe. The European Union has reached an agreement with auto makers to reduce average fuel use per car by 25%. And in late October, the new coalition government of the Social Democrats and the Greens in Germany unveiled a plan to raise taxes on fossil fuels and boost support for renewable energy.

The U.S. has far less progress to report. The Clinton Administration's plan to



AEP COAL PLANT IN WEST VIRGINIA:
We can't "say there is not a problem"

foster new, more energy-efficient technologies, viewed as inadequate at best, was watered down even more by Congress. But some hope is coming from a surprising source—the U.S. business community. "Since Kyoto, the business community has taken a major step forward," says David Sandalow, the White House's point person for international climate policy. Eighteen major companies have joined the business council of the Pew Center on Global Climate Change, agreeing to take concrete steps to explore ways to cut emissions. United Technologies Corp., for instance, plans to reduce its energy use 25% by 2007. Given today's rock-bottom energy costs, "the pressure [to boost efficiency] has been off for some time," says Leslie Carothers, UT's environment chief. "But most of us, including our CEO, feel it is not unreasonable for the developed countries to take the first step."

The question is whether such efforts

will save money. "Most of the economic studies on both sides are not believable," says Eileen Claussen, executive director of the Pew Center. "But serious change is not free." On the other hand, such change does offer enormous business opportunities. That was the message delivered at a news conference Oct. 27 by execs from Monsanto, America, and General Motors. They called for a series of measures—for eliminating fossil-fuel subsidies to better new, more efficient technologies that could reduce global warming and bolster their bottom lines. BP is making major investments in solar energy, for instance, while GM wants incentives to encourage people to buy its advanced electric cars.

MOMENTUM. Even companies that see potential new markets have a strong self-interest. Case in point: American Electric Power. CEO Draper is dead set against the Kyoto Protocol. "It's much too restrictive in terms of timetables," he says. But he believes that, politically, the momentum for a global accord is too strong to stop. "The science doesn't matter anymore," says AEP's Heydlauff. "The world has become convinced that this is a matter of considerable urgency, and they want to take action. But if we don't arrive at the right policy, it could be a stake through

the heart of AEP." And AEP execs say they have a better chance of avoiding disaster "if we acknowledge there is legitimacy to the issue and have a hand in writing the policies," says Heydlauff.

Add it up, and "there's an undercurrent of honest exploration," says one Hill staffer. "Industry knows it can't say 'Hell, no' forever." Indeed, the shift has yielded results. On Oct. 10, Senators John Chafee (R-R.I.), Connie Mack (R-Pa.) and Joseph Lieberman (D-Conn.) introduced legislation to encourage and reward companies for taking early, voluntary action to cut greenhouse gases.

These are early days yet in complex and intricate global negotiations. Countries believe that the 11-day negotiations in Buenos Aires will, at best, produce a timetable for major decisions on the many thorny issues. But with businesses around the world starting to take seriously the scientific and political threats of global warming, the chances of finding a sensible, effective policy have begun to improve.

By John Carey in Washington

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MEDICINE

WHO SHOULD GET THE TRANSPLANT?

A needs-based system for organ distribution gets derailed

Of all the scarce resources in the U.S., the scarcest may be donated organs. Some 54,000 people on any given day are waiting for the transplant of a liver, kidney, heart, or lung. Every day, 10 of those people die waiting. The federal government is trying to iron out some of the inequities in the way the few organs available for transplant are distributed around the country—and in the process, it has ignited a bitter controversy in the medical community. Because when the topic is rationing life, politics, institutional chauvinism, and regional rivalries come into play just as much as the needs of desperately ill patients.

The debate was meant to be over on Oct. 1, when new rules issued by the Health & Human Services Dept. (HHS) were to go into effect. HHS Secretary Donna E. Shalala wants organs to be allocated to patients on the basis of how sick they are rather than whether they live close to the donor—which is the way the system works now. United Network for Organ Sharing (UNOS), a private group representing all transplant centers, does not want the government to mandate how organs are allocated and hired top Washington lobbyists to plead its case. A rider attached to the federal budget bill, passed on Oct. 20, tabled the rules for a

year, during which time the Institute of Medicine, part of the National Institutes of Health, is authorized to study the issue anew.

This is more than a difference of medical opinion. There were only 59 hospitals doing liver transplants in 1987 vs. 124 today. Those centers charge anywhere from \$130,000 to \$300,000 for the operation, and any shift in the allocation of donor livers will also shift the distribution of those dollars. The large transplant centers argue that they are getting shortchanged under the present local-first system, while smaller centers fear they will lose out in the organ lottery entirely under the new regulations

and may be forced to close. "Money is a factor here, no question about it," says Dr. Richard B. Freeman Jr., associate professor at Tufts University School of Medicine. "Money and institutional prestige."

The moratorium is unlikely to take the heat out of the debate—the participants are too polarized. Doctors in favor of the present allocation system accuse the big hospitals of acting strictly out of self-interest. "There are large transplant centers that have seen a dramatic drop in their patient load, and they're th-

ones who want to change," says Dr. William W. Pfaff, professor emeritus of surgery at the University of Florida Gainesville. House Appropriations Chairman Robert L. Livingston (R-La.), who introduced the rider, says he wants "to keep Big Brother out of the organ-transplant system" altogether. And advocates for the new rules think the politicians are the villains: "They ought to go to hell," fumes Dr. John J. Fung, director of transplant surgery at the University of Pittsburgh Medical Center. "Those guys have no idea what they are doing to the patients. I guarantee you, nothing, absolutely nothing, will

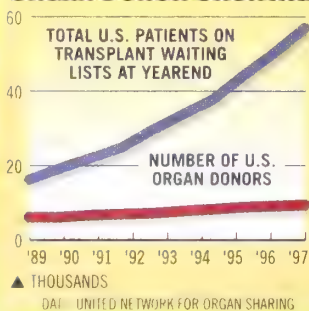
happen" during the moratorium.

LOCAL-FIRST LAWS. One thing could happen, however: If Livingston's home state of Louisiana prevails in federal court, states could refuse to share organs donated within their borders. Louisiana filed suit in August seeking to keep the federal government from overriding its own law, passed a year ago mandating that organs donated in-state can only be sent outside Louisiana if no "suitable" local recipient is found. Oklahoma, Wisconsin, South Carolina and Kentucky have similar local-first laws. "This would be a terrible development," says Dr. William E. Harmon, chairman of the New England Organ Bank and a transplant surgeon at Children's Hospital in Boston. "There is a rational or medical concept that says Louisiana organs will do better if they stay in Louisiana than if they are transported to Arkansas."

Regional or even national allocation



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organs is possible only because of recent improvements in tissue storage. A decade ago, surgeons had to transplant a donated organ almost immediately. That's still true of hearts and lungs, but a liver can now hold for some six hours after harvesting, and a kidney for up to 48 hours. The improvement removes some of the rationale for the current system, set up in 1986, that divides the U. S. into 63 organ-procurement regions administered by UNOS. When an organ becomes available in a region, it is offered first to local patients, no matter how sick they are. Only if there are no suitable candidates locally can it be offered to sicker patients in other regions.

FUTILE WAIT. The system can seem shockingly unfair to a patient who happens to be in a part of the country where demand outweighs supply. The average waiting time for a liver in Boston in 1994, for example, was 848 days, vs. 71 days in Nashville. Wealthy patients can get around the system by registering in more than one region, but UNOS says only about 5% do so. Lisa M. Joslyn of Tequesta, Fla., says her brother, Michael Moore, was a victim of the present system. He died last October at age 47 in Charleston, S.C. after futilely waiting for a liver transplant for seven months. He tried to register at a hospital in Florida, where the waiting time wasn't as long, but his HMO wouldn't pay for the out-of-network hospital. "I don't think there could be anyone sicker than my brother," says Joslyn. "Those fools in Washington are playing with people's lives."

Not all doctors agree. UNOS argues that mortality rates after a transplant operation would rise if the most critically ill patients always got top priority, because they have less chance of surviving the operation. A UNOS computer model concludes that a national policy of "sickest patient first" would boost post-transplant deaths by 32.8%. The University of Pittsburgh, one of the nation's largest transplant centers and the main backer of the HHS rules, counters with its own computer model showing that a single national list would save the lives of 275 patients annually who otherwise would have died waiting.

While the transplant centers wave their conflicting data about, the waiting lists grow (chart, page 106). And there is one issue all sides of this debate agree on: Everyone should fill out an organ donor card. Because what's saddest of all is that no matter how organs are allocated, there will never be enough to go around.

By Catherine Arnst in New York



VIDEODISKS

8-TRACKS, BETAMAX—AND DIVX?

With DVD catching on, the rival format's outlook is fuzzy

A year ago, it seemed like a gutsy move. Circuit City Stores Inc., in partnership with a Hollywood law firm, announced a new kind of videodisk called Divx, for Digital Video Express. The format was a variant of DVD, or digital video disk—with important differences. With Divx, consumers could buy a movie on a disk for \$4.49—versus \$15 and up for DVDs. They could watch it during a 48-hour period, starting when they first hit the play button, and then throw the disk away. Or they could build a library of movies on disks and watch them like pay-per-view flicks, for \$3.25 a shot. The player, hooked to a phone line, bills them when they watch movies a second or third time. For an extra \$15, they would get permanent, unlimited viewing. No more late fees or just-before-midnight return trips to the video store.

Trouble was, consumer-electronics makers, retailers, and some film studios were struggling at that time to launch conventional DVDs. They weren't consulted about Divx and tended to view the new format as a threat. Ordinary DVD machines wouldn't work with the new Divx disks. That raised the

spectre of "VHS vs. Betamax," the ugly format battle that slowed adoption of VCRs.

Well, those fears are starting to look overblown. Ordinary DVD, on sale since last fall, is off to a roaring start. More than 1 million players will be sold worldwide this year, and 2,500 movie and music video titles will be available on DVD by yearend. Meanwhile, Divx players, which can also play DVD disks, face an uphill struggle. Most electronics retailers don't want to stock the players, and video stores won't touch Divx titles. In the time Circuit City finally rolled out Divx nationally, on Sept. 25, the Richmond (Va.) chain was already downsizing its ambitions. Circuit City stock, meanwhile, slipped 32%, from a July high of 54½ to around 37.

NO GUARANTEES. The Divx saga is over. But it has highlighted the pitfalls that new formats face in an environment where almost any digital gadget is possible. Divx' distribution model—a hybrid of pay-per-view, sell-through and rental—allows users to own a film library with little up-front cost. But Divx promoters are discovering, as concepts don't come with any guar-

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tees, even when the price is right.

What went wrong? First of all, tech-noids and home-theater buffs—the folks most likely to shell out \$400 and up for a new player—complain that Divx sacrifices many of the advantages of DVD. Users don't get a choice of wide-screen vs. conventional display formats on the same disk. Nor do they get multiple-language subtitles, directors' commentaries, and theater trailers.

More important, the "digerati" don't like the Big Brother overtones of the technology—the idea that their viewing choices are being monitored. "We've had customers tell us that if we carry Divx, they won't shop our stores again," says Thomas Campbell, a corporate director at Dow Stereo/Video Inc., a nine-store San Diego chain.

A few of the problems should have been obvious from the beginning. Many consumer-electronics chains don't want to sell a product that lines the pockets of their biggest competitor, Circuit City, which gets license fees from player makers and a cut of the revenues as disks are bought and played. By the time Divx went national, only three regional chains had signed up. "Even if Divx rolls out like wildfire, [there will be] less than 1,000 storefronts, compared with 8,000 for DVD," says Ted Pine, president of market researcher InfoTech Research Inc. in Woodstock, Vt. "You're going to have to go out of your way to get it."

DESPERATION. Circuit City, which owns two-thirds of the Digital Video Express partnership, feels the pain. Unable to draw additional investors, it was forced to scale its launch budget back from \$100 million to \$60 million during the first year. "We're certainly not going to be on every retail store shelf this Christmas, so we'll focus our advertising on retailers carrying the product," says Richard L. Sharp, CEO of both Circuit City and Digital Video Express.

Divx skeptics sniff desperation in the air. Retailers say the \$60 million that Sharp is funneling to them as co-op ad funds is the most generous subsidy ever for one product. And Circuit City is pricing the players aggressively as well. The RCA model, which its stores sold

for \$499 when it was introduced, fell \$399 by the second weekend. (Conventional DVD players start at \$299.)

Another bad sign is the dearth of programming. The disks were supposed to be available everywhere, from department stores to the corner drugstore. In fact, there are just 200 titles available, and those only at the electronics stores that sell Divx players. Originally, some studios such as Disney and DreamWorks were attracted to Divx because its antipiracy safeguard exceeded that of DVDs. But those concerns have since faded, and all studios are releasing movies on DVD. Video shops

meanwhile, have always been anti-Divx. Blockbuster Inc. and Hollywood Entertainment Corp., which control more than half the video rental market, say Divx eliminates the need for return visits, which generate impulse rentals.

Perhaps the worst news for Divx promoters is the way their format has galvanized the competition. DVDs were conceived as a sale-only product. Now, Blockbuster and other

DIVX' PLUSES AND MINUSES

- ⊕ Disks sell for just \$4.49 and offer a 48-hour viewing period
- ⊖ They don't do multiple formats and subtitles, or commentaries
- ⊕ You can hold onto the disks after 48 hours and pay a fee to watch again whenever you want
- ⊖ Divx disks won't play in a PC or in other DVD machines
- ⊕ You pay \$3.25 for subsequent viewings—a bargain, if you only watch two or three times
- ⊖ If you trade disks with friends, you must pay the per-view fees

are adding the disks to their rental racks and stretching rentals out as long as seven days to get rid of the onerous midnight deadline. Stores are also renting out players from Sony, Toshiba, and Philips. "The world has changed in the rental industry," says Douglas A. Gordon, an analyst at NationsBanc Montgomery Securities in San Francisco.

That, to be sure, could work in Divx's favor. Gordon thinks the economics could still attract a small following. People may eventually realize that if they're going to watch a \$35 DVD movie on two or three times, then a pay-per-view Divx disk makes more sense. In other words, Divx could survive in a niche, just another feature on a DVD player. Robert A. Gunst, chief executive of The Good Guys Inc., isn't raring to assist Circuit City. "But that doesn't mean I'm going to deny my customer the right to choose," he says. Besides, there's really no downside for people who buy Divx players. It's not like Sony Corp. Beta VCRs, which couldn't play VHS tapes. Even if Divx should flop, you can always use the machine to play DVDs.

By Larry Armstrong in Los Angeles

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EDITED BY ELLEN LICKING

SEA CHANGE IN WATHER FORECASTS

UNDS LIKE A FORECAST-dream: Reliable long-term climate predictions recently can be made by measuring sea-surface temperatures.

Until now, scientists have used wind patterns and all were chaotic systems, making long-term predictions possible. But a study in the Oct. 23 issue of *Science* states that the weather in certain parts of the tropics is so strongly influenced by surface temperatures that changing wind and rainfall patterns become irrelevant. And because the Pacific is close to the equator, its weather patterns, too, are influenced by sea surface temperatures.

A federally funded study done by a team led by Rish Shukla, a climatologist at the George Mason University Center for Ocean-Atmospheric Studies in Fairfax, Md. Using a computer model developed by the National Weather Service, the team plugged in different sets of initial weather conditions, such as temperature and barometric pressure, and found that tropical wind and rainfall patterns tracked the ocean's surface temperature more closely than any other variable.

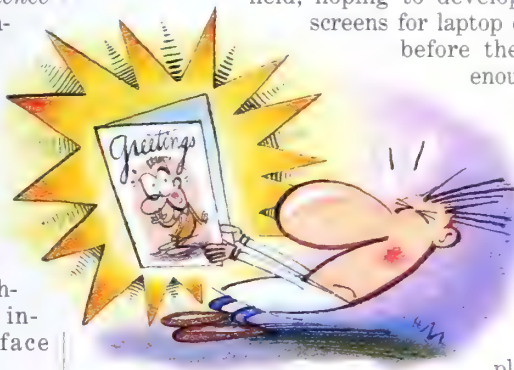
Nancy Baker, head of the National Oceanic and Atmospheric Administration, called it "an exciting new finding that could help utilities plan for power shortages and give farmers a good look at the coming growing season." The technique successfully predicted last year's El Niño, and researchers say it is just as effective in the absence of extreme events. □

YOUR NAME IN LIGHTS! VERY SMALL LIGHTS

GREETING CARDS ALREADY BABBLE, TRUMPET, AND SING THEIR missives to unsuspecting recipients with the help of low-cost sound chips. Soon, such cards may put their messages up in lights. Researchers at the UCLA School of Engineering & Applied Sciences, led by materials science professor Yang Yang, have come up with a novel way of printing light-emitting plastics onto greeting cards using common inkjet printing equipment. The raw materials and the printing process are both cheap, Yang says, and the cards wouldn't require any more power than the sound chips in talking birthday cards.

The new luminescent plastics resemble light-emitting diodes, used for displays on clocks, instrument panels, and other appliances. Dozens of companies have jumped into the field, hoping to develop cheaper, brighter screens for laptop computers. But long before the screens are good enough to power laptop applications, Yang thinks they'll find a niche in snazzy decorations for cards and other disposable gifts.

Yang is now trying to develop even flashier, multicolor displays. Neil Gross



SOMEDAY, A SEEING-EYE GERM?

NATURE'S PHOTONIC DEVICES may one day put Silicon Valley's best chips to shame. Robert R. Birge, director of the W.M. Keck Center for Molecular Electronics at New York's Syracuse University, says his research team is just months away from demonstrating an optical memory device that exploits the switching properties of a protein found in the cell wall of a bacterium. A small test-tube full of the protein could store 7 to 10 gigabytes of digital data.

The protein is called bacteriorhodopsin. It's a purplish chemical produced in the membrane of *Halobacterium halobium*, a salt-marsh microorganism that scientists have been studying since the mid-1970s. When the bacteria are starved of nutrients and struck by light, the protein switches rapidly from purple to yellow (illustration). Controlled by lasers, this color change could be used as an on-off switch in computers. Researchers also hope to harness the protein for next-generation flat displays and artificial retinas for aging or damaged eyes.

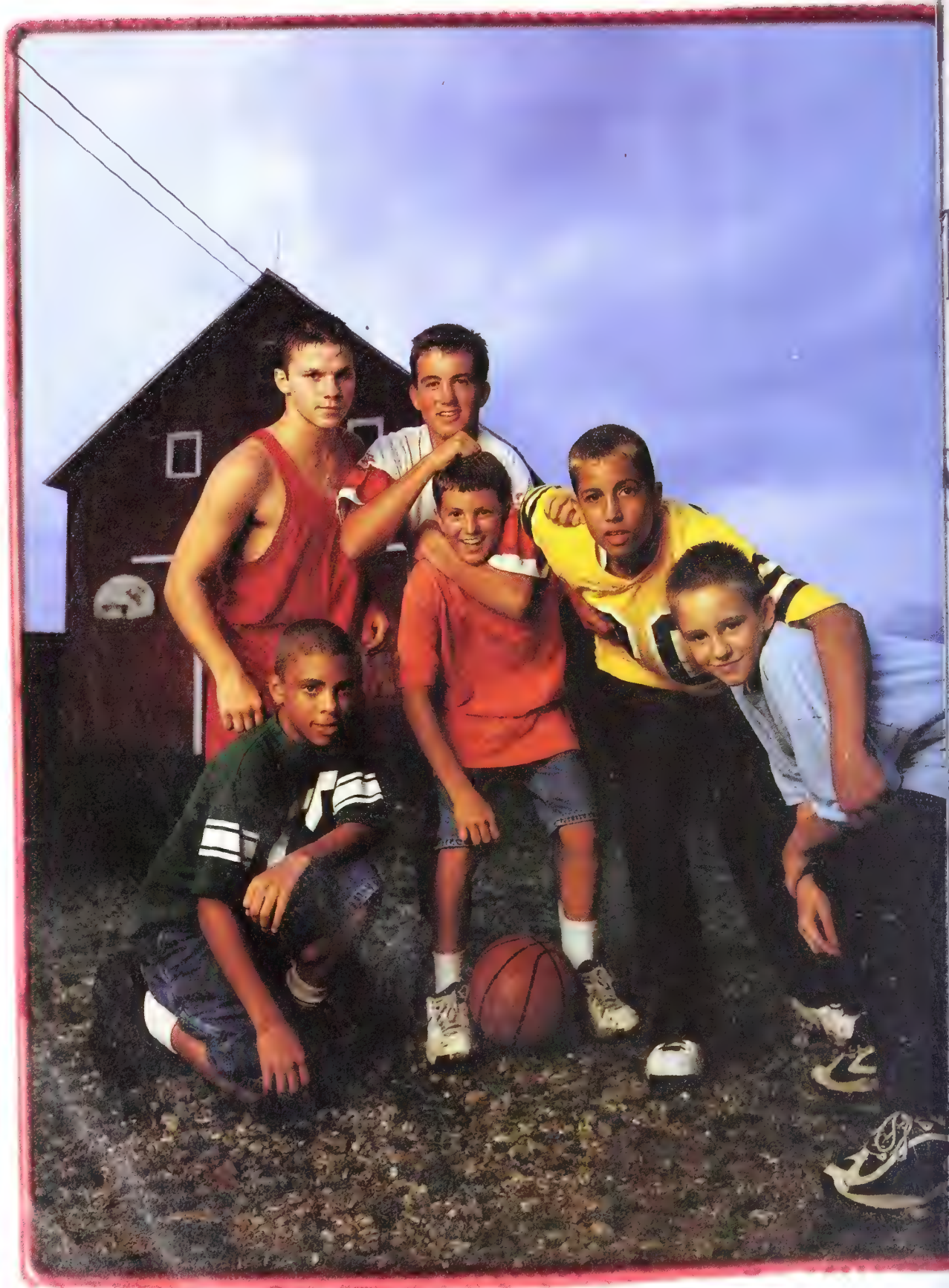
To perfect those applications, scientists need large quantities of pure protein crystals. These are difficult to grow under normal conditions. So NASA has been lending a hand, growing large crystals aboard the Space Shuttle. Nellie Andreeva

ZEBRAFISH: A NEW ALLY IN THE LAB

SCIENTISTS OFTEN USE MICE AND MONKEYS AS HUMAN disease models. Now add to that menagerie the zebrafish. A team of researchers led by Harvard University geneticist Leonard I. Zon has discovered that a particular kind of zebrafish called a sauterne—because it is as pale as white wine—is one of only two known fish that can be used to model a human disease. In the November issue of the journal *Nature Genetics*, the researchers report that the fish has a genetic mutation that causes it to develop a disease identical to congenital sideroblastic anemia (CSA), a rare human condition that reduces the number of red blood cells.

People—and zebrafish—with CSA have a mutation in the *alas2* gene that leads to a hemoglobin deficiency. Zon says the zebrafish makes an ideal disease model: It's only about an inch long and completely transparent, so researchers can tell whether it is producing hemoglobin, which turns blood cells red, merely by looking at the fish under a microscope. And we may turn out to have more in common with the little fish than *alas2*. Zon says that the fish share certain genetic arrangements with humans, and the National Institutes of Health recently approved a \$5 million initiative to map the entire zebrafish genome. Zon figures it will take about three years before the project will start producing results. □

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INDIANA TEAM SPIRIT *It's building* MORE THAN JUST GREAT ATHLETES

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qualities that has made their state great. And it's definitely one of the reasons Indiana was chosen as the site of Toyota's major new U.S. vehicle manufacturing plant.

By the time it's fully operational, Toyota Motor Manufacturing, Indiana will have the capacity to produce 150,000 vehicles per year. The 2,300 new jobs created here will raise Toyota's direct U.S. employment to more than 25,000. Now that's what we call an expansion team.

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Admit it. You haven't been this worried since—well, it's hard to recall when. The crash of '87—that was a shocker, no question. And the Persian Gulf War three years later was a concern. But after eight years of mostly blue skies and green grass, suddenly last summer you discovered frightening threats to your money and investments in what seems like every zone. There's deflation in Asia. Default in Russia. Devaluation in Latin America. Looming impeachment proceedings and recession in the U.S.—the bad news just keeps on coming.

Bill Aurilio knows the feeling. In many ways, the 32-year-old controller of U.S. Dermatologies Inc., a small drug company in Lawrenceville, N.J., is lucky. He's the father of newborn twins, Jimmy and Jordan, plus nine-year-old Joshua. He and his teacher wife, Karyn, are building a \$350,000 home near Princeton. To make the \$40,000 downpayment, the Aurilios cashed out much of their stock holdings last July at the market's peak.

Yet Aurilio isn't crowing. He had believed his stocks were headed higher and that by selling in July, he'd be leaving 10 grand on the table. Instead, the stock he sold at \$21, Intelligroup Inc., sank below \$1. Another he let go at \$8, Ariel Corp., fell to

nearly \$2. Now, he wonders, "What if things keep going in that direction? What if the housing market loses value? All of a sudden, I've turned into the most conservative person in the world."

Is the market turmoil of the past few months making you, too, rethink the risks to your wealth? If so, good for you. Balancing risks against potential returns is the essence of successful investing, but

it's a priority people tended to forget as stock prices kept soaring. Now, with the market in another frame of mind, BUSINESS WEEK aims to help you understand not just the opportunities ahead but also the risks. And there are plenty of the latter these days. The Federal Reserve's recent interest-rate cuts have many people wondering if Alan Greenspan knows something about the economy the rest of us don't.

In any event, those blue skies are turning cloudy. Some economists see U.S. economic growth slowing to 1.9% from 3.5% in 1998, and many others think it'll be even less. Corporate profits may expand less than 3% next year, and as for growth in the once-booming emerging markets, forget it.

Sorting all this out isn't easy, even for big-money pros. Consider the answers we heard after posing this question to two of Wall Street's brightest

Investment strategies for a slowing economy



IS IT TIME TO RETHINK YOUR PORTFOLIO?

Your investment results depend mostly on how you split your money among stocks, bonds, and cash. Over the past four decades, the more investors allocated to stocks, the greater their returns have been but also the greater the risks they took. If you're feeling bullish, you may want to take advantage of lower prices now to boost your stock allocation. If you're bearish, you may want to put more into bonds or, if you'll need the money soon, cash.

STRATEGY	% ALLOCATION Stocks/Bonds/Cash	AVG. ANNUAL RETURN*	BEST/WORST YR'S RETURN	BEST/WORST ANNUALIZED RETURN**	NUMBER OF DOWN YRS
MOST CONSERVATIVE	25/40/35	7.9%	20.8%/-2.1%	10.7%/5.2%	3
MODERATELY CONSERVATIVE	40/40/20	8.8	22.5/-7.5	12.2/5.7	8
MODERATE	60/30/10	9.8	27.6/-14.1	13.8/6.1	8
MODERATELY AGGRESSIVE	80/20/0	10.8	33.2/-20.5	15.4/6.4	9
MOST AGGRESSIVE	100/0/0	11.6	43.4/-26.5	16.7/6.5	9

*Results for 1956 through 1997. Assumes dividend reinvestment and annual rebalancing
DATA: T. ROWE PRICE ASSOCIATES, BUSINESS WEEK

**Over any 20-year period

stars, Fidelity Investments' Peter S. Lynch (page 122) and PIMCO Advisors' William H. Gross, whose \$140 billion in assets makes him the nation's leading bond investor. Should individual investors worry about Japan, Brazil, deflation, liquidity squeezes—all of that? "Tune out. Tune out. They should tune out all this stuff," Lynch replied. Said Gross: "This global contagion is the most important and dangerous phenomenon to financial stability that we've seen in the past 60 years. Investors have to be concerned and aware of it, and make their investment strategies based upon it."

"VERY NEBULOUS." Who's right? Both are. But which answer applies to you? It depends on who you are. Can you afford to focus on tuning your portfolio to the threats of recession and deflation, as Gross suggests? Not if you haven't first arranged your own basic financial security. Not if you aren't clear why you're investing and when you'll need your money back. "You ought to say to yourself, 'Do I need this money in the next year?'" Lynch says. If so, forget stocks. "That should be true at all times—when the market is going up or the market is going down."

Look at it another way: Are you ready to exploit the temptingly low prices of stocks in places like Japan? You may be—if you truly can afford to shoulder the risk of waiting many years for a profit. Brandes Investment Partners is no household name, yet the \$20 billion San Diego firm has run up since 1974 one of the best records among international investors. Over the past 10 years, ended September, Brandes' institutional Global Equity product returned an annual average of

14.9%, net of fees, vs. 9.7% for the Morgan Stanley Capital International World Index.

After cashing in fat profits this year on such European stocks as Alcatel, which it started buying back in 1993 when the Continent was out of favor, Brandes now is focusing on big Japanese companies like Hitachi Ltd., which Managing Partner Glenn R. Carlson reckons is selling for 60% of book value. "If we had a 12-month view, we absolutely would not be investing in these companies," says Carlson. "But with three to five years, we don't think there's a lot of risk."

Indeed, knowing where to focus your worries gives you part of the answer to how much risk you can afford to take. Are the risks you face peculiar to you? Or are they external ones we all may endure? The rest of the answer comes from a process that's every bit as personal: a simple gut-check, something you can do by scanning the asset allocation table above. Whatever your age, do you really want your entire portfolio in stocks? History says that's the route to the biggest returns. But you'd better be prepared for money-losing years, a fate all-stock investors would have suffered nine times since 1956. "Risk is very nebulous," says Luke M. Collins, managing director of KPMG's Investment Consulting Group in Chicago. "I don't care if you have a 50-year time horizon. If you can't sleep at night because of something Louis Rukeyser said, then you've taken on too much risk."

Stomaching steep investment losses is something that advisers like Robert F. Mewshaw find comes harder to rookies. His firm in Towson, Md., Van Sant & Mewshaw Inc., oversees \$150 million in personal accounts, and after clients got their August statements, Mewshaw's phones began ringing. "People who've been with us a long time, 15 years or so, we didn't get any calls from," Mewshaw says. "But newer clients? They were pretty astounded that their accounts went down. They realized for the first time, 'Hey, I can lose money here.'"

As you reflect on your proper level of investment risk, it's worth stopping to ask how the sight of losses in your recent mutual fund or brokerage statements left you feeling. If you fell sick over the possibility that you may now have trouble meeting some coming obligation—a down payment on a house, say, or a tuition bill—then you need to lessen your risk. Allocate less of your assets to stocks. And make sure your money is in places you can tap into when you need it.

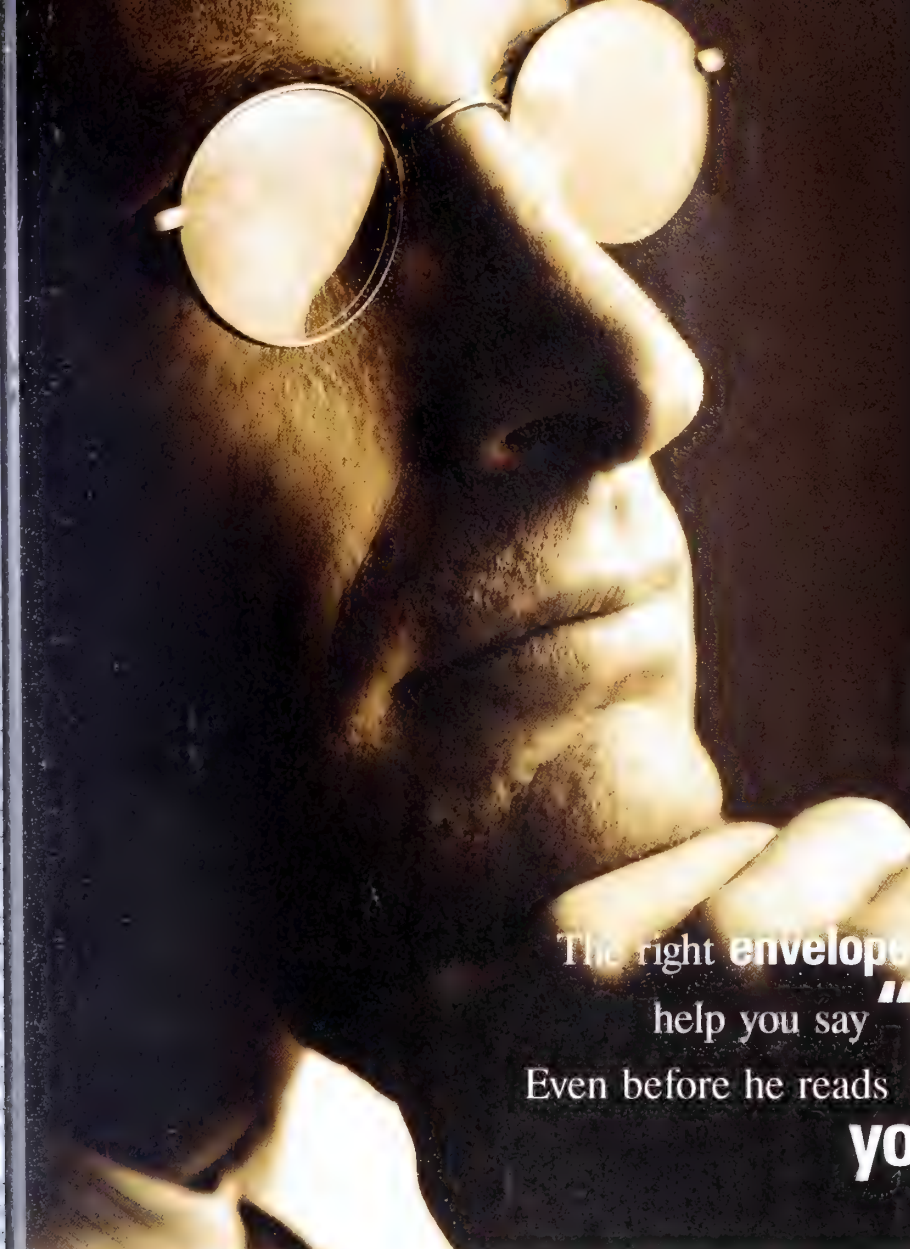
By the same token, perhaps paper losses have only left you eager to buy into depressed markets with cash you've patiently sat on for just

BusinessWeek



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PERSONAL WEALTH

You'll find more on investing strategies, including interviews with investment gurus Peter Lynch and William H. Gross, plus special articles by Standard & Poor's Corp. investment strategist Sam Stovall and chief economist David Blitzer, at Businessweek Online (www.businessweek.com) and S&P Personal Wealth (www.personalwealth.com).



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this moment. Or maybe you have fresh cash—your paycheck-by-paycheck retirement plan investments, a bonus, or some other windfall—to put to work. Of course, you want to invest in today's best opportunities, but first you need to ask yourself a question. Will these investments sit in a regular taxable account or in a 401(k) or another tax-deferred account?

The answer is crucial. A move that's smart in one may be unwise in another. "I know people who trade their taxable accounts, and I never understand that," notes Brian Rivotto, a financial planner and partner with KPMG in Boston. Since most unsheltered sales of stocks (page 124), bonds (page 132), or mutual funds (page 128) are tax-



able events (page 135), focusing your active portfolio moves in an individual retirement account or other tax-deferred plan usually makes the best sense.

For that reason, in rebalancing your portfolio among equity, fixed-income, and cash assets, it's best to do as much selling as possible within your tax-deferred retirement accounts. Trading there gives you no tax benefits from bailing out of losers. So trim your retirement account's winning assets—most likely bonds—and buy more in the losing categories, especially small-company and international shares that have suffered so in the past year.

QUALITY PAYS. Although in recent weeks small-company stocks have perked up, they still trade at historically low price-earnings multiples, says Ned Notzon, whose job as co-manager of T. Rowe Price's Spectrum funds includes divining which areas of stock and bond markets to favor. The

risk: If the U.S. slides into recession, small caps will bear the brunt. He also likes international equities, as does KPMG's Collins, particularly those in battered emerging markets, where he recommends investing 5% to 10% of a long-term portfolio via a closed-end, non-country-specific fund. "When I talk to people about emerging markets now, they kind of roll their eyes," he says. "They think, 'What are you, crazy?' But you've got to believe the long-term prospects for these countries are good."

Likewise, the contrarians at Brandes are finding values in Asia for the first time in many years, and not just in Japan. Brandes is also buying in Hong Kong, specifically conglomerate Swire Pacific Ltd., the majority owner of Cathay Pacific Airways. It is also stocking up on shares in Brazil's giant utility holding company, Eletrobrás. "It's sort of AT&T prior to the breakup," Carlson says. He figures at a market value of \$12 billion, Eletrobrás traded recently at less than half the value of its distinct businesses.

When you rebalance your portfolio, you'll have to address your bond allocation, too. If you have fresh cash to invest or if you're resetting your asset allocation more conservatively, look at your taxable account first. If your federal tax rate is 28% or higher, you probably should be holding only tax-exempt municipal bonds or muni-bond funds. Munis typically pay 80% or 85% of the yield on Treasuries. But right now, they're unusually cheap, yielding in some cases 100% or more of taxable Treasury debt. "If I can buy a single-A muni at the same yield tax-free as a triple-A Treasury," says PIMCO's Gross, "there's no doubt which one I'd buy."

In your retirement account however, the tax-exemption on a muni will do you no good. Instead, Gross advises focusing on high-credit-quality, intermediate-term taxable government bonds, or a mortgage-backed bond fund limited to such government-sponsored issues as Ginnie Maes. Here's why: If, as Gross believes, a U.S. recession next year is increasingly likely, higher-credit-quality bonds will endure better. In addition, while Gross sees the Fed cutting short-term interest rates further

in coming months, he thinks the 5% recent yield on long-term Treasuries already anticipates this. Instead, Gross advises, "focus on maturities in the 5- to 10-year intermediate category," whose prices would move up more sharply.

What if you're more bullish than Gross on the U.S. economy? Reach for the higher yields paid

AURILIO AND FAMILY

Building a new home—and having second thoughts about the market

FREE REPORTS FROM A SELECT GROUP OF AMERICA'S FASTEST-GROWING COMPANIES

The exceptional companies listed below want you to know more about them. Complete the form below for **free** copies of their annual reports. Nearly every actively traded company was screened, using data provided by Standard & Poor's Compustat Services, to determine the top growth companies invited to appear. They ranged in size from a few giants of corporate America to emerging growth companies with sales of at least \$5 million. All were screened for exceptional long-term sales growth, recent growth trends, size and stock price – none under \$3.00 per share. **Only 15% of Compustat's database passed these tests and we invited to make this free offer of investor information. Thirty-six of these exceptional companies appear below.**

Acxiom Corporation (www.acxiom.com)
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AMX Corporation (www.amx.com)
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Catellus Development Corp. (www.catellus.com)
diversified real estate development

CD Warehouse, Inc. (www.cdwarehouse.com)
retail music

Chase Corporation (www.chasecorp.com)
mfg. of insulating tapes & protective coatings

The Cooper Companies, Inc. (www.cooperco.com)
health care products and services

Coyote Sports (www.stockmaker.com)
diversified sports equip. mfg. & distrib.

Cybox Computer Products Corp. (www.cybox.com)
comp. peripheral switch / extension prod.

DBT Online, Inc. (www.dbtonline.com)
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Dental Care Alliance (www.dentalcarealliance.com)
dental practice management company

DSP Technology Inc. (www.dspt.com)
advanced solutions for vehicle engine development

Dynamex (www.dynamex.com)
same-day transportation

Espire Communications, Inc. (www.espire.net)
telecommunications data & Internet svcs.

HPSC, Inc. (www.hpsc.com)
specialty finance company

Hyperion Solutions Corporation (www.hyperion.com)
software for analytic applications

IDEX Corporation (www.idexcorp.com)
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Information Management Assoc. (www.imaedge.com)
sales, marketing, customer service call center software

Information Management Resources (www.imr.com)
leading global provider of IT services

19. Investment Technology Group, Inc. (www.itginc.com)
advanced technologies for institutional investors

20. Jack Henry & Associates, Inc. (www.jackhenry.com)
computer software for banks

21. JDA Software Group, Inc. (www.jda.com)
integrated retail software products

22. Kronos Incorporated (www.kronos.com)
frontline labor management

23. Lithia Motors, Inc. (www.lithia.com)
automotive retailing

24. MTS Systems Corporation (www.mts.com)
simulation and modeling for mechanical design

25. Pacific Crest Capital, Inc. (www.paccrest.com)
commercial real estate / FDIC deposits

26. PC Connection (www.pcconnection.com)
leading direct marketer of computer prod.

27. PLATINUM technology, inc. (www.platinum.com)
provide software and services

28. PLD Telekom Inc. (www.pldtele.com)
telecoms in the former Soviet Union

29. RF Micro Devices, Inc. (www.rfmd.com)
radio frequency integrated circuits for wireless mkt.

30. Safeskin Corporation (www.safeskin.com)
glove products for medical / hitech / sci. mkts.

31. Southwest Securities Group, Inc. (www.swst.com)
securities and investment banking

32. Startec Global Communications (www.startec.com)
ethnic residential int'l. long distance service

33. Technitrol, Inc. (www.technitrol.com)
electronic and electrical components

34. United Video Satellite Group, Inc. (www.uvsg.com)
program guidance, media via satellite

35. Xomed Surgical Products, Inc. (www.xomed.com)
ear, nose & throat (ENT) surgical products

36. York Research Corp. (www.wall-street.com / york.html)
develops, owns, operates energy projects

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by longer-term bonds and lower-quality issues, even junk. In all of this, though, remember there's a thin line between resetting your portfolio's asset allocation and trying to time market bottoms and tops—a hazardous exercise. If you arrived at a comfortable asset allocation a year ago or more, bring your portfolio back to those proportions and relax as best you can.

Fidelity's Peter Lynch suggests you should say, "This is what I'm happy with. This is a mix I'm content with, and I'm willing to ride with this for the next 5, 10, 15 years, and I'm just not going to worry." And what about Bill Aurilio? He's dealing with his worries via a two-track plan: In his taxable account, he has already bought back some stocks he sold at far higher prices last summer. But he's also saving more and keeping it in a money market account and paying

closer attention to risk. "I'm focused on what I can do to make sure that I don't lose the rent," he says. "I'm pulling everything back."

In his retirement account, meanwhile, Aurilio is still 100% in stocks, and he aims to leave it that way even though it's down by 25% since July. "If I were concerned about taking the cash out next year to retire, I'd be in Treasuries," he says. "Even if we're in for a couple of rough years, 10 years from now the market will be higher and stronger and better. Why miss that?"

For decades, investing this way, with patience and a full appreciation of the market's risks, has paid off handsomely. Once you've calibrated your risk tolerance, the balance of our Special Report can help you make the right choices amid this world of worries.

By Robert Barken

PETER LYNCH'S INVESTOR TEST

Does investing leave you feeling ignorant? As part of his "crusade to fight financial illiteracy," Fidelity Investments' legendary stockpicker, Peter Lynch, created the following test of your investing smarts. Take the test, then check your answers against the key at the bottom of the page. For Lynch's explanations of the correct answers, head to Business Week Online (www.businessweek.com) or to America Online, keyword: BW.

1. The primary reason stock prices have risen over time is:

- a) Investors keep putting new money into stocks
- b) Companies have grown their earnings per share over time
- c) Investors are generally optimistic
- d) The population of the U.S. has grown

2. How many market corrections (declines of 10% or more) have there been since 1970?

- a) 5 b) 9 c) 12 d) 21

3. The five headlines shown below ran in the last quarter of 1990:

- The Real Estate Bust* — Newsweek
- Uncertainty Reigns for U.S. Economy* — The Wall Street Journal
- Can America Still Compete?* — Time
- Can Your Bank Stay Afloat?* — U.S. News & World Report
- Troops March Closer to War* — Washington Post

What was the total return for the stock market the following year?

- a) -6.8% b) 3.4% c) 12.2%
- d) 30.5%

4. If you tried to time the market for the past 20 years and were out of stocks and in cash during the best 15 months, when stock prices advanced the most, you would have given up 76% of the

gains captured by the buy-and-hold investors in stocks.

- a) True b) False

5. What will have the greatest impact on the risk and return of your investment?

- a) Deciding how to allocate your investment dollars among asset classes (stocks, bonds, cash)
- b) Deciding whether to buy individual stocks or mutual funds
- c) Deciding which specific stocks or mutual funds to buy

6. Stock prices will decline in a recession, but they tend to turn up when the economy recovers.

- a) True b) False

7. Which 10-year period saw the highest total return for the S&P 500 since 1926?

- a) June 1949 to May 1959
- b) June 1980 to May 1990
- c) January 1988 to December 1997

8. The S&P 500 was down 21.5% in October, 1987, the month of the crash. What was the total return of intermediate government bonds that month?

- a) -10.8% b) -5.3% c) 1.2%
- d) 3.0% e) 14.3%

9. Since 1926, small-company stocks have outperformed

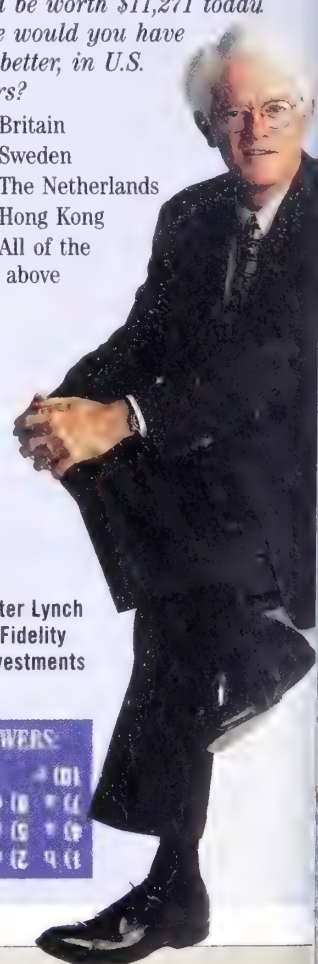
large-company stocks.

- a) True b) False

10. A \$1,000 investment in the U.S. stock market in 1982 would be worth \$11,271 today. Where would you have done better, in U.S. dollars?

- a) Britain
- b) Sweden
- c) The Netherlands
- d) Hong Kong
- e) All of the above

Peter Lynch
of Fidelity
Investments



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THROW THOSE DARTS IN THE TRASH

You can't win by luck in this market

You didn't have to be Warren Buffett to make money in stocks over the past three years. But this year, as the market has careened from exuberance to gloom and then swung part-way back, what once seemed like an easy way to profit has become difficult indeed. "This is a dangerous market—one that clearly requires a lot more than putting money into an index fund or throwing darts and buying whatever they happen to hit," says William Meehan, chief analyst at institutional brokerage Cantor Fitzgerald.

Although there is no evidence that stock-pickers beat the indexes during the market decline, actively managed mutual funds in the high-visibility large-cap arena have excelled during prior periods of turbulence—the recessions of the early 1990s and 1980s—according to Morningstar Inc. If we're now in a stock-picker's market in which not every stock that goes down pops back up, where should reformed dart throwers look? On Wall Street, opinion is split between hard-hit cyclical, whose fortunes fluctuate with economic growth, and defensive big-cap growth issues that are safe havens in times of economic stress. There's a case for each. Your risk tolerance and willingness to bet on a stronger economy can help you decide which might work best for you.

CYCLICAL SURGE. Currently, the market is rehabilitating the cyclical: banks, computer makers, airlines, and smokestack industries. Savaged by a bear market fearful of recession, these stocks have gained between 7% and 12% since the Federal Reserve Board's surprise rate cut on Oct. 15. Still, Bear, Stearns & Co. Chief Investment Strategist Elizabeth Mackay vows cyclical are "some of the cheapest" issues around. She cites Foster Wheeler, the engineering and construction firm, and cruise operator Carnival Corp., with price-earnings ratios of 9.1 and 22.2, respectively.

Some cyclical also have history on their side. Since 1960, half of the 10 industries that have done the best in the six months following a shift to a looser Fed policy have been consumer cyclical, in-



ng retailers and hotel companies, says Stovall, senior investment strategist at dard & Poor's Corp. A variety of sec- makes up the remainder. But not yone thinks the economy will grow enough to sustain the cyclical's cur- rally. With the outlook for corporate ts deteriorating, and amid concerns the global credit crunch will persist, e see large-cap growth stocks as ter, more defensive plays.

arshall A. Acuff, equity strategist at non Smith Barney Inc., likes big-name that sell the medicine, food, electrici- nd tobacco people won't do without, in bad times. His picks include Philip is, Duke Energy, and Schering-Plough. defensive investing is not as easy as it was. Despite a recent rally, gold s—a traditional hedge in bad times—lost their luster. Industry deregulation, while, means utilities face less cer- earnings growth, and consumer-prod- makers with their consistent earnings histories, as Coca-Cola, remain costly.

atever category you favor, the key is to stick fundamentals. That means researching a com- s product line, business strategy, competition, rowth prospects and assessing whether its stock ood value. These days, money managers also ask er a prospect is insulated from troubled global mies and has enough cash to survive in a cred- onstrained world. "There are pockets of oppor- tunity," says Chuck Royce, manager of the Royce Total Return Fund. But it's best to look for them "stock by stock, not in- dustry by industry."

Although the past is full of dashed hopes for recoveries, Royce thinks the turnaround is real this time. The Russell 2000 Index of small-company stocks is up 18% since its Oct. 8 low but still down 25% from its 1998 high. Last summer, before the Russell hit bottom, Royce who special- izes in downtrodden small com- panies, put the fund's 20% cash cushion to work. One pick: Charming Shoppes Inc., a 1,160-store women's cloth- ier. With \$266 million in cash, it can improve earnings per share by mak- ing acquisitions or buying back stock. It's trading at 16 times estimated 1999 earnings of 25¢ a share. Royce thinks the \$4 stock could double along with profits within three years, re- turning Charming to where it was in 1996.

Some strategists are also bull- ish on regional banks. They were battered in August and September alongside their mon- ey-center brethren. But with their

A PORTFOLIO OF CYCLICALS

COMPANY	STOCK PRICE*	52-WK. HIGH	P-E**	COMMENT
GANNETT	61	75	21	Consumer spending driving ad sales
MELLON BANK	59	80	18	Insulated from global turmoil
PIONEER-STANDARD	9	18	9	Small cap with improving prospects
PROBUSINESS SERVICES	37	43	NA	Fast growing payroll processor
WAL-MART	65	70	31	Double-digit growth rate

DEFENSIVE STOCK PICKS

COMPANY	STOCK PRICE*	52-WK. HIGH	P-E**	COMMENT
ALBERTSON'S	55	58	24	Earnings growth potential due to merger
BRISTOL-MYERS SQUIBB	109	126	31	Rich new-product pipeline
DUKE ENERGY	63	71	18	Low-cost producer
NORTHROP GRUMMAN	79	139	12	Benefits from defense spending rise
PHILIP MORRIS	51	51	16	Strong yield and recent earnings

*Oct. 26

**Based on 1999 estimated earnings

NA=Not applicable

DATA: BLOOMBERG FINANCIAL MARKETS

exposure to overseas turmoil limited, "there's no reason why the regional banks should have been crushed," says Morgan Stanley Dean Witter U.S. investment strategist Peter J. Canelo. He singles out Mellon Bank, First Union, and Bank of New York, which stand to gain from strong refinancing and loan demand. Previously off about 30%, "they have come back better than the market but are still down."

Technology stocks, meanwhile, have bounced hard off their lows, with the tech-laden NASDAQ rising nearly 20% since Oct. 8. But Philip W. Treick, manager of the Transamerica Premier Aggressive Growth fund, likes online bookseller Amazon.com, which nearly breaks even on a cash-flow basis and, unlike many Web startups, has enough cash to underwrite expansion plans. Although Barnes & Noble Inc. and German giant Bertelsmann have partnered up to enter the online-bookstore arena, Amazon "has a big lead" and loyal customers, Treick adds.

COLD COMFORT. High-yielding stocks are traditional defensive plays. Take oil-service issues. Yanked downward when oil prices dropped, they stand to gain from an El Niño-linked cooling trend, which should push prices into a \$15 to \$18 range for the next year. Plus, "they're cheap," says Canelo, who likes Baker Hughes Inc. It's now only \$5 above its 52-week low of \$17.25 and has a 2.1% yield, 60 basis points above that of the S&P.

Downturn-proof supermarkets are another twist on the defensive theme. Stuart T. Freeman, chief equity strategist at A.G. Edwards Inc., likes Albertson's, an 878-store chain that is cutting costs and raising earnings by merging with American Stores Inc. While the stock is slightly more expensive than the S&P 500 based on price-earnings ratios, Freeman expects Albertson's to post earnings gains of 13% in January, 1999, trouncing the 3.6% consensus estimate for the S&P 500 index.

As market volatility becomes a fact of life, those who choose stocks the old way—by getting to know them—will have the courage and faith to ride out the storm. Who knows? The stock-pickers may even start to outperform the mighty market indexes.

By Anne Tergesen in New York

WHAT TO DO

Check out profits, strategy, and growth prospects. See if the company has cash. Make sure it's not exposed to global ills

...of further ahead, you need a sense of direction. That's why
should try talking to a different type of banker. Because, in
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DOING THE MUTUAL SHUFFLE

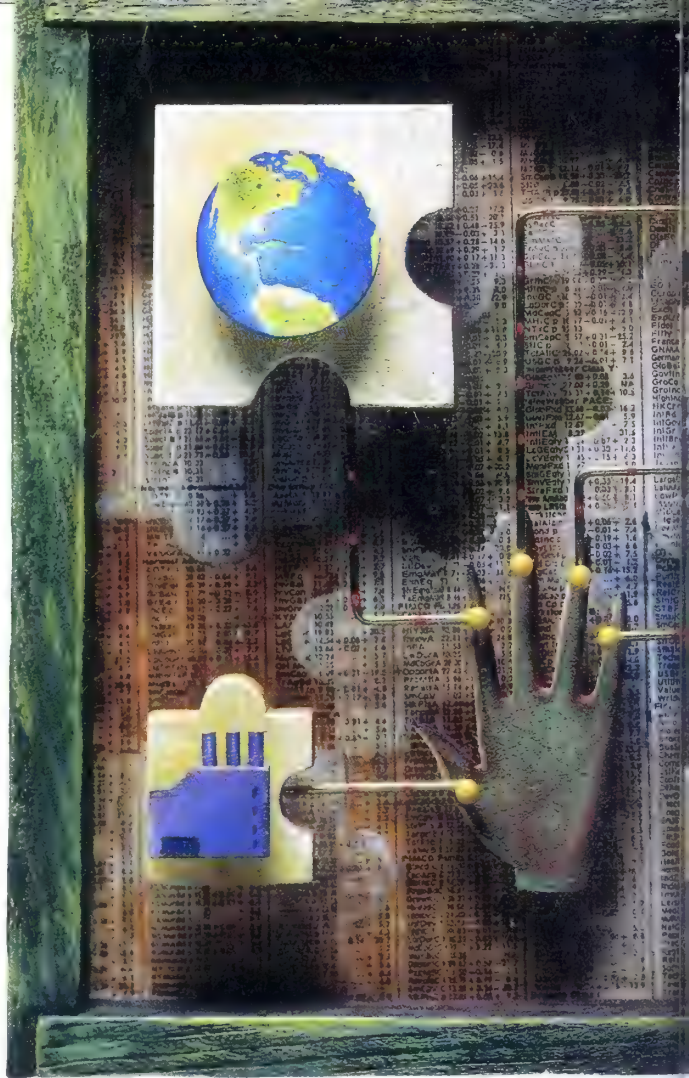
If volatile markets upset your mix, time to rebalance

November is when mutual-fund investors search for losers to sell for tax deductions or to offset investment gains. For the past few years, they haven't found much to dump. The average U.S. equity fund doubled in value between 1995 and 1997. But in 1998, things are different. Although the stock market is recovering from its worst tumble in eight years, damage to the funds is widespread. The average equity fund was down 2.7% through Oct. 23, says Morningstar Inc.

Selling is no problem compared with deciding what to do with the proceeds from the sale. For most investors, the smartest move is to recycle the money into equity funds. If you have the same investment goals you had before, such as retirement or education, you have little choice. If you're selling to declare a tax loss, you need to find a temporary home for your money. You can't buy back the fund for 30 days, lest the Internal Revenue Service disallow the deduction. If you stash the cash in a money-market fund and the market jumps, you'll only reinvest at higher prices.

OUT OF WHACK. Beyond tax-related selling, now is also good time to reassess your portfolio. The manic markets of the past year have thrown many asset-allocation plans out of whack. If your \$100,000 investment program was in balance a year ago—say, 50% large-cap, 25% small-cap, and 25% international funds—and you earned an average return, your stake was worth \$91,130 on Sept. 30. And by then, large-caps made up 56%, and small-caps and international represented 22% each. "Rebuild your portfolio to the ratios you previously targeted," says Robert Bingham of San Francisco financial advisory firm Bingham Osborn & Scarborough. That means reallocate assets or use new money to make up any deficits.

Shifting among funds this time of year is tricky.



You don't want to buy in a taxable account before a large taxable distribution. You can always park money in an index fund, which makes little or no capital-gains payouts, until after the distribution. And as long as you're moving money, you might as well upgrade your portfolio. To find candidates, we screened for funds with noteworthy attributes using Morningstar Principia Pro and BUSINESS WEEK Interactive Mutual Fund Scoreboard (www.businessweek.com). We also talked with pros who use funds to invest clients' money.

One of the most difficult jobs over the past several years was running an actively managed large-cap fund that competed with the Standard & Poor's 500-stock index. But a few savvy managers stood out. Morningstar analysts praise the large-cap Ameristock, Clipper, Legg Mason Value Premier Shares, and T. Rowe Price Dividend Growth fund for their "high alpha." That means the funds earned greater-than-expected returns considering the risk they took. That's no small feat during a period when the S&P trounced 96% of domestic equity funds.

Take little-known Ameristock, based in Moraga, Calif. Manager Nicholas D. Gerber focuses on the 100 largest U.S. companies, and from those he has assembled a portfolio of 44. Gerber weights



stocks by their degree of undervaluation. Among his largest holdings are Intel and Caterpillar. Toward the bottom are the expensive ones—Microsoft, Procter & Gamble, and Pfizer. The result, says Gerber: a fund whose portfolio resembles the S&P, but with a higher yield and lower price-earnings ratio.

The Clipper Fund is a different sort of high alpha fund. Although it has trailed the S&P by 1.7% annually over the past three years, Clipper's managers are very picky—and that attitude is now paying off. Clipper is ahead of the S&P for the year, 13.7% to 11.6%. Clipper concentrates on companies that dominate their markets and sell at no greater than

of their "intrinsic value," which manager Daniel C. Sandler describes as "what a rational investor would pay. That keeps the portfolio concentrated in 17 companies, including Philip Morris, Fannie Mae, and McDonald's. Moreover, the fund's managers will build up cash, rather than leverage, to their standards. That's a drag in hot markets—in the first half of 1998, the fund earned less than half of the S&P. In chillier environments, the strategy clicks.

STAR WINNER. Even before the market downturn, mid-cap and small-cap funds were lagging. Stevens, chief investment officer of Wilshire Investments Inc., argues that small-caps haven't been as cheap relative to large-caps in 25 years. "Small- and mid-cap funds have underperformed for so long, a fund that we rate A or to Morningstar awards five stars is scarce. That's what makes Mairs & Power Growth so attractive. The St. Paul (Minn.)-based fund invests primarily in growth companies in the Upper Mid-Cap. First Eagle Fund of America, a mid-cap value fund, and Oak Value, a mid-cap growth, are considered good choices.

Adding good small-cap funds is made tougher by the fact that many of the best are closed to new investors. But in the wake of the market's

tailspin, some, such as Third Avenue Value Fund, are reopening. This fund, which is run by vulture investor Martin J. Whitman, finds value in bankruptcies, distressed securities, and out-of-favor companies. Among his newer additions: Montgomery Ward.

Some small-cap funds have become too big to invest successfully in little companies. Not the Chicago-based Fasciano Fund, with about \$120 million in assets and a sturdy record. Manager Michael F. Fasciano invests in companies with earnings growth rates of 15% to 25% a year, and BUSINESS WEEK's scoreboard gives Fasciano an A in its peer group for risk-adjusted returns.

CONTINENTAL DRIFT. Just as is the case in the U.S., Europe's equity markets have run into a rough patch. But the coming of the euro, which 11 countries will adopt as currency next year, is seen as a powerful catalyst for Continental stocks. A smart way to play this trend, says Walter Wisniewski of Paragon Capital Management in Syosset, N.Y., is the Scudder Greater Europe Growth Fund. Or you could choose one of the better-performing diversified funds that are invested heavily in Europe. BT Investment International Equity, Fidelity Diversified International, and Scout Worldwide all have more than 60% of their assets in Europe. The difference is that if all of a sudden Asia or Latin America looks promising, these diversified funds can change their course.

When it comes time to trade in your losers and shop for new funds, keep in mind that gains in the stock market may be harder to come by in the near future. True, interest rates are falling, but so are profit growth and the global economy. The latter have come together to produce the Correction of '98. That should give you an ideal opportunity to rebalance your portfolio and target those funds that can take advantage of Wall Street's weaker tone.

By Jeffrey M. Laderman in New York

WHAT TO DO

If the amounts of your holdings in small-, mid-, and large-cap funds have shifted, restore them to their former targets

REJIGGING YOUR PORTFOLIO? CONSIDER THESE FUNDS

	ASSETS (\$MILLION)	EXPENSE RATIO(%)	TOTAL RETURN(%)*		
			1998	1-YEAR	3-YEAR
LARGE-CAP					
AMERISTOCK	10.7	0.56	17.6	17.5	26.9
CLIPPER	874.4	1.08	13.7	12.4	20.9
LEGG MASON VALUE PRIMARY SH.	4836.5	1.73	16.1	5.0	29.3
T. ROWE PRICE DIVIDEND GROWTH	998.7	0.80	5.1	7.1	21.6
SMALL- AND MID-CAP					
FAM VALUE	301.4	1.24	-5.3	-2.9	13.3
FASCIANO	117.4	1.30	-1.2	2.5	16.6
FIRST EAGLE FUND OF AMERICA Y	335.9	1.70	7.1	7.1	23.1
MAIRS & POWER GROWTH	498.7	0.84	-3.3	-4.7	16.2
INTERNATIONAL					
BT INVESTMENT INTL. EQUITY	1286.7	1.50	7.3	-3.7	13.7
FIDELITY DIVERSIFIED INTL.	1812.0	1.23	4.1	-5.0	11.9
SCOUT WORLDWIDE	80.0	0.87	8.2	-0.9	13.3
SCUDDER GREATER EUROPE GR.	1121.5	1.66	14.5	16.9	23.1

*Annualized, including appreciation plus reinvestment of dividends and capital gains, before taxes. Year-to-date returns through Oct. 23; all others through Sept. 30.
DATA: MORNINGSTAR INC., BW

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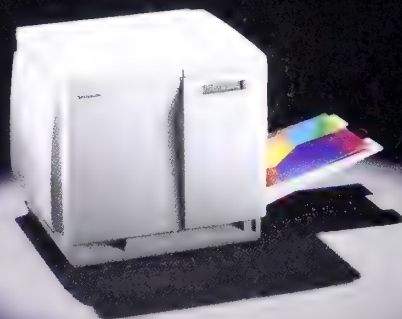
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THE BOND JUNGLE

There are still some good buys—but this is an especially tricky market

In just a year and a half, the world has become a lot less friendly for bond-fund investors seeking income. Since 1996, the yield on 30-year Treasury bonds has fallen more than two percentage points, from 7.15% to an all-time low of just 4.75. With the economy slowing and the Federal Reserve cutting short-term interest rates, long-term Treasury yields could head even lower—perhaps 4.7% by 1999, estimates Michael R. Rosenberg, manager of international fixed-income research at Merrill Lynch & Co.

into a high-yield corporate bond fund right now. With investors fleeing riskier securities in the wake of Russia's summertime debt default and the subsequent implosion of Long-Term Capital Management and other hedge funds, the spread between yields on even better-rated junk bonds and on Treasuries has soared a couple hundred basis points lately. "It is this premium that makes the [junk] market most attractive right now," notes Jerry Paul, manager of the INVESCO High Yield fund. But you need both patience and an



Those who got into bonds early, of course, have now earned hefty capital gains. But if the past few months' gyrations on Wall Street are making you nervous about stocks and prompting you to increase the weight of bonds in your portfolio, you're in for a formidable challenge. To maximize your income, you now must accept greater credit risk, try to capture the best possible total return by moving into funds with longer maturities and more volatility, or sit tight in short-term funds until long-term rates reverse their course. We've selected a number of bond funds that have turned in solid performances in the past (table, page 134). But before you buy, you need to get a handle on the dynamics of the turbulent bond market.

If you're really hungry for yield in a world of 5% Treasuries, it might be tempting to plunge

iron stomach to buy a high-yield fund today.

Indeed, income investors who were already in junk funds are now seeing the flip side of this sector. Junk debt shares many characteristics with stocks, and when the equity market started to slide over the summer amid concerns over earnings and a weaker economy, high-yield bonds also gave way. The average high-yield fund lost more than 7% in the third quarter, while other bond funds were enjoying one of their best periods in years. Some popular funds were hit even harder, including the \$2.7 billion Fidelity High-Income Fund, which lost 8.34%, even though it still has one of the best three-year returns (table). "Liquidity is awful," complains Paul. But, of course, "that is also what makes for opportunity." Given the sector's volatility, and given that it's unclear when the market's current problems

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will be resolved, Paul thinks investors considering high-yield funds should be prepared to let their money sit for at least three to five years.

If junk funds are too risky for your taste but you think interest rates will keep falling, consider moving into higher-quality funds with longer maturities. Long-term Treasury and municipal funds, for example, are more sensitive to interest-rate changes than short-term bond funds. So their net asset value will go up more, and their total returns will gain faster as rates drop. Not surprisingly, Treasury funds with maturities in excess of 10 years were the stars during the third quarter, with a total return of about 5.3%. They looked better over the past 12 months, scoring a total return of about 14.5%. The top funds in the category achieved even higher returns. The \$1.2 billion Vanguard Fixed Income Long-Term U.S. Treasury fund was up 7.7% for the third quarter and 21% over 12 months. At the same time, it has held a yield of just under 5.5%. The \$325 million T. Rowe Price U.S. Treasury Long-Term fund, meanwhile, scored a third-quarter return of 7.4%, a 12-month result of 21.2%, and a yield of 5.1%. While yields appear set to fall further, that will translate into capital gains and tidy total returns, say many analysts.

JUNK FUNDS

HIGH YIELDS, BIG LOSSES

FUND	TOTAL RETURN (%)			
	3-YR.	YEAR-TO-DATE*	3RD QTR.	12-MO. YIELD
FIDELITY HIGH-INCOME	10.35	-5.67	-8.34	9.10
INVESCO HIGH-YIELD	10.98	-5.99	-6.97	9.17
NORTHEAST INVESTORS	9.53	-6.95	-10.45	9.21
SAFECO HIGH-YIELD NO LOAD	9.00	-1.54	-3.32	8.95
T. ROWE PRICE HIGH-YIELD	9.45	-2.05	-4.72	9.27

GOVERNMENT FUNDS

LESS RISK, SUPERIOR RETURNS

FUND	TOTAL RETURN (%)			
	3-YR.	YEAR-TO-DATE*	3RD QTR.	12-MO. YIELD
AMERICAN CENT.-BEN. L/T TREAS	11.56	10.42	7.21	5.15
DREYFUS U.S. GOVT. SECURITIES	10.28	9.68	7.16	4.96
INVESCO U.S. GOVT. SECURITIES	9.47	8.64	5.53	4.81
RUSHMORE U.S. GOVT. BOND	11.13	12.21	8.47	4.48
T. ROWE PRICE U.S. TREAS L/T	11.37	11.13	7.42	5.12

MUNI FUNDS

HIGH AFTER-TAX YIELDS

FUND	TOTAL RETURN (%)			
	3-YR.	YEAR-TO-DATE*	3RD QTR.	12-MO. YIELD
DREYFUS BASIC MUNI BOND	9.26	6.14	3.64	4.77
FIDELITY SPARTAN MUNI INCOME	8.09	5.31	3.11	4.69
SAFECO MUNICIPAL BOND NOLOAD	8.93	5.72	3.32	4.87
SCHWAB LONG-TERM TAX-FREE BOND	8.16	5.63	3.01	4.73
STRONG MUNICIPAL BOND	8.32	5.83	2.83	5.06

Through October 23

DATA: MORNINGSTAR INC.

For investors in higher tax brackets, municipal-bond funds—especially longer-maturity portfolios in excess of 15 years—are tempting. Investors worldwide have been flocking to Treasuries, leaving muni bonds unappreciated despite their tax advantages. Thomas G. Doe, president of Municipal Market Advisors Inc., a money manager in Concord, Mass., notes that long-term muni yields are now more than 100% of those on 30-year Treasuries after averaging 80% to 90% since 1990. Figuring out whether a muni fund is right for you is easy. First, calculate a fund's tax-equivalent yield, or the yield a taxable fund would have to offer to equal that of a municipal fund. Divide the tax-free yield by 1 minus your tax bracket. For example, the average high-quality, long-term national municipal bond fund currently yields about 4.5%. That's equivalent to a 7.45% taxable yield for an investor in the top, 39.6%, federal bracket. After taxes, the only fund category that even comes close is corporate high-yield.

HAVEN. While few believe rates will rise in the near term, it's important to remember that, as with any bond fund of longer maturity, an increase in interest rates can erase any income benefit you may have gained. That happened in 1994, when the Fed raised rates 2.5 percentage points and long-term muni and government bond funds lost more than 6% in total return for the year.

If you're unsure how long interest rates will stay low, you might sit tight in a money-market fund. That's not a bad place to be, considering the average rate on taxable money funds is holding just below 5%. In money funds, you face little risk to your principal because shares remain stable at \$1, although they aren't federally insured. Money fund assets are up 20% this year, to \$1.33 trillion, as investors have sought a haven from stock market volatility. The third quarter saw the largest inflow in money funds history, with \$94 billion in new money added.

If interest rates do an about-face someday, investors in money funds will see returns go up even as longer-term investors take a hit. But if you want to gain yield or go for total return today, you must take some extra risks—there's no way out of it. Whether you want to concentrate on total return or grab for the attractive yields still available in muni and junk funds, there is still a case to be made for moving into bonds.

By Chip Norton in Lexington, Mass.
Norton is managing editor of S&P Personal Wealth.



Want more help with fixed-income investing? Click on www.personalwealth.com and go to the "news/research" area for the latest on bonds and mutual funds.

TAMING THE TAX MAN

Ease the sting of this year's market correction with smart tax moves

If there's a silver lining to this year's market turmoil, maybe it's this: 1998 is going to be one heck of a year for tax planning.

O.K., so maybe the vision of quality time with your accountant doesn't make your heart sing. But with the right tax moves, you can let the Internal Revenue Service share the pain of tumbling markets. Meanwhile, your portfolio's roller-coaster ride has created ample opportunities to make tax-savvy gifts to your heirs and tune up your retirement accounts. But it's best to act now—

not when your tax preparer calls in mid-December to schedule a year-end checkup.

Start with your retirement accounts. If you hurried to convert a traditional individual retirement account to a new Roth IRA during 1998's first half, you probably made a good choice but at a bad time. To make that conversion, you must pay taxes on the old IRA's value, less any nondeductible contributions. But if you converted a \$100,000 IRA before the market's tumble, you now face taxes on \$100,000, while the account's value may have fallen to \$75,000 or less.

Fortunately, Congress gave you an escape hatch. You can undo the traditional IRA-to-Roth conversion, then reconvert to a new Roth IRA at the account's new and diminished value. If the reconverted IRA is worth only \$75,000, you only face taxes on \$75,000—and can, if the transaction is wrapped up in 1998, spread the tax load evenly over four years. On Oct. 20, the IRS announced that savers would be allowed to undo a Roth

conversion and then redo it only once per account between Nov. 1 and the end of 1999. After that, the tax agency hinted, such round trips might be banned.

If you're like most investors, the bigger concern is the state of your taxable accounts. The four-year bull market and three-months-and-counting correction have left most investors with a mix of long-term gains and short-term losses. Take someone who plugged \$1,000 a month into stocks matching the Standard & Poor's 500-stock index starting in January, 1994, reinvesting after-tax dividends. By Oct. 1, Ibbotson Associates calculates, that person would have been sitting on \$35,055 in potential long-term capital gains on stocks held for more than 12 months, plus \$349 in potential short-term profits and \$495 in potential short-term losses. Those gains and losses are

unrealized, and have no tax effects until a sale. But what if you cashed out some positions during the sell-off? You're now staring at some sizable realized capital gains. "Take some losses now to offset those gains," advises Thomas P. Ochenschlager, a partner at accountants Grant Thornton.

WILD CARD. Be sure to take enough short-term losses to wipe out any realized short-term gains, which would be taxed at your top federal rate, up to 39.6%. You can also use net short-term losses to cover long-term profits dollar for dollar. But that's less rewarding, since net long-term gains are taxed at 20% or less. If your realized losses already exceed your capital gains, you can use the excess to shelter up to \$3,000 (\$1,500 for married taxpayers filing separate returns) in salary, interest, or dividends. (Congress eliminated 1997's awkward medium-term category, for assets held 12 to 18 months, in this year's IRS reform bill.)

The wild card in these calculations may be your mutual funds. During the summer slump, many funds sold stocks and realized short- and long-term gains that must be distributed to shareholders by yearend. It's not bad enough that your

WHAT TO DO

If you have a mixture of potential long-term gains with short-term losses, take some losses now



fund may be down 20% off its peak. You're going to face a tax bill as well.

What can you do? First, call your fund to get an estimate of the distribution's size and its record date. If you own shares on that day, you'll be credited with the dividends and long- and short-term capital gains the fund distributes. Some fund families, like Vanguard Group, have already published figures. Fidelity Investments, the largest fund group, expects to post estimates in late November. Your fund company can also help figure your basis—usually the average cost you paid for shares bought directly and via dividend reinvestment.

Then consider whether this fund belongs in your portfolio for the long term. If not, sell it before the record date, and don't buy a replacement until the new fund has distributed its gains. If it's a fund you want to keep, compare its current value to your basis. If it's worth less than you paid, you might want to sell now to claim the loss and avoid the distribution. If you've profited, as you probably have on most funds you've owned more than a year, the tax on your gain if you sell probably exceeds the tax on the distribution. Swallow hard and look for losses elsewhere to offset the distribution.

"DOUBLING UP." What if you've lost money on funds or stocks that you nevertheless think have a future? You can sell to claim a loss, then buy them back. But be careful. Under the IRS' "wash sale" rule, the loss will be disallowed if you buy the same or substantially identical securities within 30 days before or after the sale. Note that options on the stock you're selling, or the same issuer's bonds with the same interest rate, would be deemed "substantially identical," according to tax experts at the J. K. Lasser Institute.

To avoid being out of the market for a month,

you can buy similar securities—a different growth fund, say, or Exxon instead of Shell. Or you can "double up" by purchasing another block of the same security before Nov. 30, then selling the original, loss-ridden block 31 days later. That assumes you always instruct your broker or fund to sell specific shares, the best practice if you want to minimize taxes.

You don't have to sell weak stocks to get tax advantages from them. When share prices are down, gifts of stock to your children or grandchildren can pay off. Say your stock falls from \$50 to \$40. Your \$10,000 gift, the amount you can give one recipient annually without triggering gift tax, will now cover 250 shares, rather than 200. Your recipient's portfolio will be larger and your eventual estate tax bill smaller.

Stock options can put an extra spin on the strategy. Say your employer awarded you nonqualified options, the most common type. They are now vested but under water. In other words, the stock is selling for less than what you would pay to exercise your option. As a result, the option's value may be a fraction of the shares' actual price. Planner William Baldwin of Pillar Financial Advisors in Lexington, Mass., cites a client with 12,975 options, exercisable at \$15 a share, in a biotech stock selling for \$5.13. Under the IRS's valuation, the options were worth \$1.42. But the client had a longer view than the tax man. "He believes these shares are going to go to \$50 or higher," Baldwin says. So Baldwin advised the client to give the options to his grandchildren in trust. If the stock recovers and the trustee exercises the options and sells the shares, the client will then have to pay tax, at ordinary-income rates, on the difference between the stock's market value and the exercise price. But by then, "his other shares [in the company] will be up, he'll be feeling flush, and he'll have avoided a lot of estate tax," Baldwin says. This strategy won't work for incentive stock options because they aren't transferable.

Once you know where your investments stand, you need to rough out your total tax picture for 1998. Pay special attention to the alternative minimum tax, a special levy that bites when your deductions and other tax breaks exceed IRS limits. Lots of net short-term gains, or heavy state and local tax payments, can throw you into the AMT. If so, you'll want to stand the traditional year-end tax-planning advice on its head: Postpone deductible expenses, which the AMT devalues, and speed up income, which the AMT taxes at 28% instead of rates up to 39.6%.

Tax planning is no one's idea of fun. But then, neither is a bear market—let alone a bear market followed by a big check to Uncle Sam. Tune up your portfolio now, and you'll at least have the pleasure of sharing the bear with the IRS.

By Mike McNamee in Washington

WHAT TO DO

When share prices are down, gifts of stock to your children or grandchildren can pay off handsomely

LESSENING THE TAX BITE

Check Your Funds

- Call now for estimates of short- and long-term capital gains and record dates for the distribution.

Keep a Fund or Dump It?

- If a fund is worth less than you paid for it, sell before the distribution. If it's up only slightly, compare the tax on the distribution with the tax on profits when you sell. Ask yourself: "Is this a position I want for the long term?"

Avoid a Tax Bill

- Don't invest in a fund until after it has made its yearend distribution.

Match up Winners and Losers

- If you have big capital losses, use them to shelter capital gains and up to \$3,000 in ordinary income. Look for short-term winners owned less than 12 months to cash in.

Sell the Right Lots

- Instruct your broker or fund company to sell the most costly shares to minimize your capital gains.

Paradox:



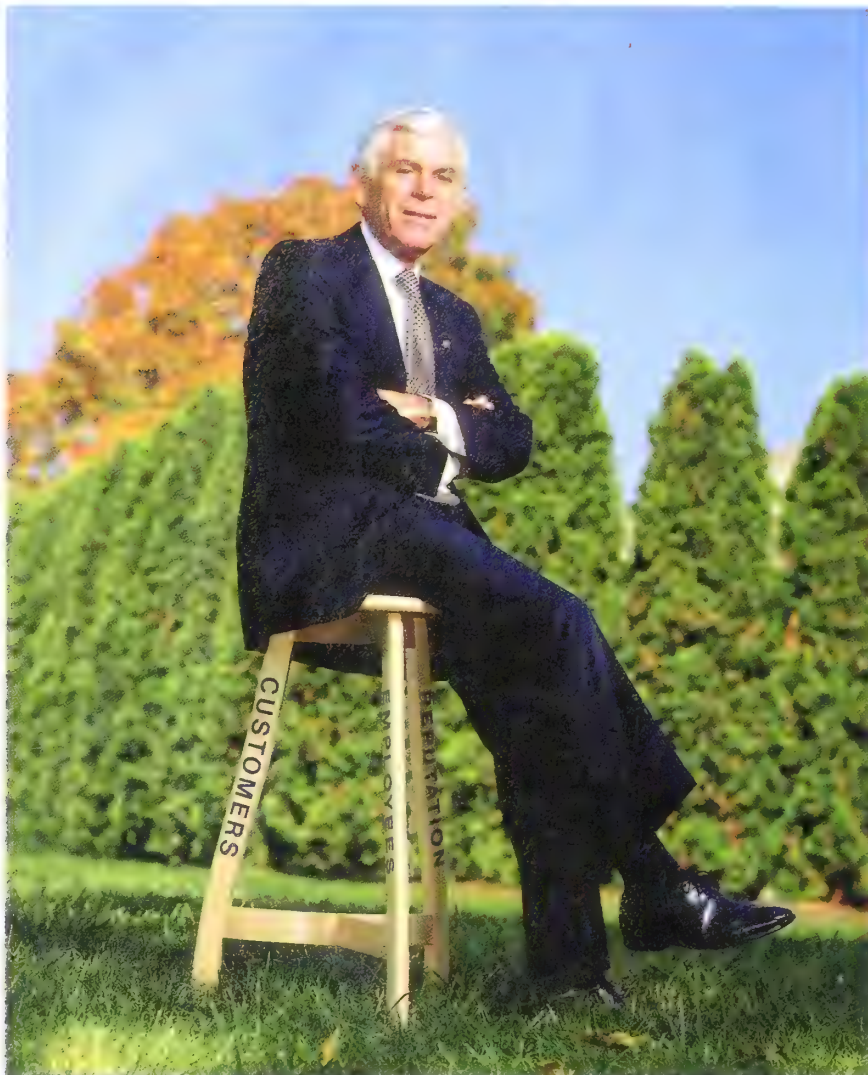
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It's tough to categorize the 1999 Dodge Intrepid. On the one hand, it has a lease rate that's lean and a price tag it's mid-size. Yet Intrepid offers so much interior space that it's officially recognized as a large car by the EPA. Its standard aluminum engine delivers a stingy EPA estimated mpg of 21 city, 30 highway, yet it generates a stout 200 horsepower. That's more power per liter than any regular-fuel V-6 engine available today. And while Intrepid's ride is supple, its handling is crisp and controlled. Large car, mid-size car, family car, luxury car, sports sedan. That's not a paradox, it's an Intrepid. Dodge Intrepid. We're changing everything. Again.

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COMPUTERS

UNISYS AIMS FOR THE TOP OF THE TREE

Will Weinbach's new push erase its second-tier status?

The faces around him said it all. When Lawrence A. Weinbach took the top job at ailing Unisys Corp. in the fall of 1997, he quickly noticed that no one in the halls of the Blue Bell (Pa.) computer company smiled. In fact, many employees didn't even look him in the eye. And when Weinbach went out to visit big customers, most asked the same uneasy question: "Is

Unisys viable?" Says Weinbach: "Nobody thought this company had a future."

These days, there's little worry about Unisys' survival. One year after his arrival, Weinbach, 58, has slashed the company's staggering debt load by nearly \$1 billion, to a more manageable \$1.3 billion. That has helped the company turn in strong earnings all year long. On Oct. 15, Unisys announced that profits near-

MASTER REBUILDER

Weinbach has reduced debt and sent profits soaring. Now he wants to shore up Unisys service-oriented businesses

ly doubled in the third quarter, to \$1.8 million on \$1.8 billion in sales. And stock has more than doubled, to \$25 since Weinbach's arrival.

Not bad for the first year on the job. But Weinbach's next year will be an even bigger test. He wants to build the company's services business—expected to reach \$5 billion this year—into a high-octane profit engine, focusing on areas where Unisys has proven expertise—such as financial services and telecommunications. The trouble is, Weinbach faces a delicate balancing act: He has to rev up the services side as he copes with the expected decline of the company's traditional mainframe business, which still generates about 60% of the company's earnings. "The challenge is to do this and be perceived as a top-tier [services] player," says Merrill Lynch & Co. analyst Steve M. Milunovich. "They are still viewed as a second-tier computer company." Concedes Weinbach: "Are we there yet? But we are on our way."

REVENUE RAISER. Certainly Weinbach is not used to playing in the second tier. An accountant by training, he previously had a 36-year career at accounting and consulting giant Andersen Worldwide. Chief executive for his last eight years there, he upped revenues from \$3.4 billion to \$11.3 billion. But with Andersen's mandatory retirement policy of 62 five years away, Weinbach decided to start a second career. "The challenge of coming into a turnaround and saving if we could get [Unisys] to come alive was very enticing," he says.

At Unisys, Weinbach quickly moved to impose financial discipline on the company's erratic information services business. That unit focuses on a variety of services including the design and installation of sophisticated document imaging, voice-messaging, or customer information systems for companies like Norwest Financial, the consumer-finance business of Norwest Corp. Those businesses, together with the company's working and maintenance-service group, are expected to generate 67% of Unisys' \$7.2 billion in annual revenues this year. But the service unit contributes only 39% of the company's operating income. One reason: Unisys bid so aggressively to win some contracts that a number of them, including one to manage

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With mainframes expected to decline, Unisys is plowing millions into R&D for high-end servers

health insurance system for Florida state employees, were money losers.

Indeed, the information service group racked up losses of \$400 million in 1995 and 1996 alone. Now, before a bid is made, the proposal gets a stringent internal review by executives who don't receive commissions on the deal. And Weinbach says Unisys won't be chasing huge outsourcing deals, in part because profits on such projects are slim.

Where Weinbach is scrambling after new business is in midsize service deals that can help the company build up its Internet expertise. A Unisys package called Cool ICE, for example, is the software glue that helps customers create

Sun. "Their key was they were successful in Europe with customers that were happy with them," says Bill Hack, publishing systems director at Philadelphia Newspapers Inc., which is rolling out Hermes at its *Philadelphia Inquirer* and *Philadelphia Daily News* operations. So far, the midsize-service effort is paying off. In the first nine months of this year, total service revenue rose 17%, to \$3.5 billion, generating operating income of \$221 million, compared with just \$86 million in the year-earlier period. And more than 25% of orders in services this year are from new clients.

While Weinbach says services are the future of Unisys, he isn't turning his

None of Weinbach's ambitious plans will flourish, however, if he isn't able to overhaul the company's stodgy old mainframe image. That holds Unisys back in everything from recruiting to being considered a serious candidate for high-flight contracts. A new ad campaign costing \$20 million in the fourth quarter alone—is aimed at blowing away that image. With its showcasing of hip young professionals who are so obsessed with their jobs that their heads are actually computer screens, the ads are a break from Unisys' traditional pitch.

Weinbach also is raising the bar on training. He's planning to roll out "Unisys University," a technical

LARRY WEINBACH'S HEALTH PLAN FOR UNISYS

SERVICES Focus on key markets where the company has expertise, including financial services, publishing, and transportation. The goal: Pump up the operating income contribution from services to about 65% in a few years from 39% now.

PRODUCTS Continue to upgrade the existing mainframe line. Hardware sales—the bulk of which still come from mainframes—account for 33% of total revenue. At the same time, develop a new line of servers that will run Microsoft's Windows NT software.

TALENT After years of head-count cuts, the company is trying to boost morale and upgrade the workforce. Unisys University is being established to upgrade the service expertise within the company, and a company matching its 401(k) program was reinstated.

electronic commerce applications that link their databases to Web sites. Although coming off a small customer base, sales are up 300% this year. Unisys also is hawking another program, FBA Navigator, a system for managing customer information at retail banks that allows banks to send personally tailored marketing pitches to customers over the Web.

Products like Navigator are part of another scheme to drive service revenue. Weinbach calls it repeatable solutions. These are predesigned systems that are developed to meet the needs of industries such as publishing, telecommunications, and transportation, which can then be tailored—using Unisys experts—to fit the specific requirements of individual customers and any number of hardware platforms.

Unisys, for instance, offers daily newspapers a system called Hermes. Developed in Europe in the 1970s, Hermes manages the flow of everything from archived stories and photos to the newspaper's daily content and layout. It has caught fire in the last three years, with a total of 100 newspapers now using the system—33 signed up in 1998 alone—including Rupert Murdoch's News International PLC, publisher of London's *The*

back on hardware. Instead, he's zeroing in on high-end servers and mainframes. Earlier this year, he outsourced the production of low-end servers and personal computers to Hewlett-Packard Co. That's allowing the company to target much of its \$300 million research and development budget on a new generation of high-end servers. The new machines—the first line will be ready by mid-1999—will run Microsoft Corp.'s Windows NT operating system as well as other operating systems and use new-generation Intel Corp. chips.

MICRO-BET. That bet isn't without risks. Right now NT is the hot ticket among corporate users, but it isn't viewed as reliable enough to handle the high volume, mission-critical functions typically run on mainframes. Unisys is betting that, by partnering with Microsoft, the two companies can boost NT to handle those tasks for industries such as financial services. If the new hardware delivers, Unisys will be set to exploit the hot market for NT software and services. "The risk is that making NT industrial-strength takes longer and is more difficult than they currently project," says analyst Charles C. Burns of technology researcher Giga Information Group Inc.

management training program, in January of 1999 to keep employees up on technical issues and build a pool of experts. He reinstated a matching contribution from the company in employee 401(k) programs—cut during 1995 years—and started a program in which employees can buy Unisys stock at a discount. Now, employee turnover is down from 14% in 1996 to about 9% in the first quarter of this year. "We were concerned about morale and supporting the company," says George F. Thorpe, director of information systems at the New York Clearing House Assn., a Unisys mainframe customer. "Now we can see a turnaround in attitude."

There's still a lot of room for improvement, though. One senior executive at the company says some in-fighting continues between the hardware and services teams on issues like financial resources and manpower. Weinbach knows those units need to coordinate sales and service efforts better, so earlier this year he created one sales group to handle the company's 200 largest accounts. "We are trying to change the culture of this company," Weinbach says. If he can do that, Unisys may be able to focus on prospering instead of surviving.

By Amy Barrett in Blue Bell, Pa.

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- Peter Lynch

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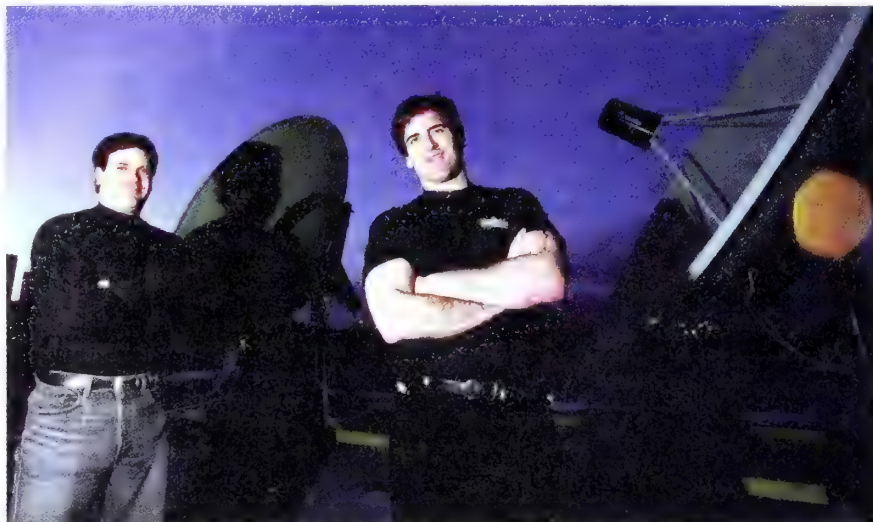
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INTERNET

CAN BROADCAST.COM KEEP MAKING A BIG NOISE?

The Web's audio and video pioneer now has a host of rivals



For Mark Cuban and Todd Wagner, success has come almost too easily. When the co-founders of Broadcast.com, a service that sends video and audio clips over the Internet, took their company public in July, investors snapped up shares and made the small, three-year-old firm worth almost \$1 billion. Then, President Clinton's grand jury testimony brought more than 1 million visitors to their site on Sept. 21, shoring up the company's vision that delivering audio and video is much more than ham radio over the Web.

Broadcast.com's jump-start helps explain the market's enthusiasm in a sector famous for steroidal valuations. Much as Yahoo! Inc. pioneered Web directories and became a portal for topics from finance to sports, Broadcast.com is the leader in bringing together and broadcasting audio and video content. And even though the recent slide in tech stocks sent its stock down 36% from a July peak, Cuban's shares are worth some \$200 million, while Wagner's are valued at more than \$100 million. But the pair are not carefree. "I worry about everything," says CEO Wagner, 38. "But I'm almost more afraid because I don't see anybody in the rearview mirror."

He ought to look again. Although far behind, major media and savvy tech companies such as RealNetworks, IntervU, and NBC are **WAGNER AND CUBAN: NBC and Disney are nipping at their heels**

TECH UPSTARTS

eyeing Broadcast.com's consumer and corporate business.

In a few years, when online audio and video go mainstream, they threaten to commoditize Broadcast.com's franchises. "Broadcast.com is going to get competition on all fronts," says analyst Mark Mooradian of Jupiter Communications.

To be fair, Cuban and Wagner have

TUNING IN BROADCAST.COM

NETWORK Has the largest commercial broadcast network for the Web through ties with 35 Internet service providers. Rival IntervU claims its smaller, more decentralized network is superior.

CONTENT Broadcasts some 370 radio stations and 30 TV stations daily and offers live coverage of more than 420 sports teams. But rival RealNetworks pulls together more than 1,100 live stations, and media giants such as NBC are moving in.

BUSINESS SERVICES Has hosted business events for more than 490 organizations in nine countries. Competitor IntervU, though, is making business services its primary focus.

been running too fast to look back. Broadcast.com earns money from banners on its Web sites and multimedia ads that precede its feeds. But its most creative service is broadcasting business events, such as analysts' conferences and earnings announcements. More than 1,100 companies including Intel and Texas Instruments, pay up to \$350,000 for the broadcasts, which at 44% of Broadcast.com's third-quarter revenue, are the company's biggest revenue source.

The Web allows Broadcast.com to put together niche programming beyond the reach of any cable operator. The company offers live broadcasts of more than 370 radio stations and 30 TV stations and has exclusive Internet rights to audio feeds of baseball games and the Super Bowl. There are also CDs, e-books, and audiobooks—and a host of specialized feeds including airport traffic control-tower babble. In September, the company served 520,000 daily users, a 30% jump in the past three months.

It's an attractive—and improving—picture for investors. Even though Broadcast.com posted a third-quarter loss of \$3.9 million on revenues of \$4.5 million, the numbers were stronger than analysts' expected. Mary G. Meeker, a Morgan Stanley Dean Witter analyst, recommends the stock, forecasts profitability in 2002, with net income of \$3.9 million on revenues of \$66.1 million.

But rivals are gunning on every front. RealNetworks and IntervU Inc. claim their networks are more efficient since data are stored on large computers around the Net, in contrast to Broadcast.com's approach of broadcasting everything from its Dallas headquarters. **"GNATS."** Competition is building among media giants as well. NBC has a 1% stake in IntervU and is beefing up its own sites with video and audio. Walt Disney Co., with interests in portal provider Foseek Corp., plans to introduce the Go Network site later this year, which will boast content from Disney, ABC, and ESPN. And TCI Music's Soniconet offers a library of music videos.

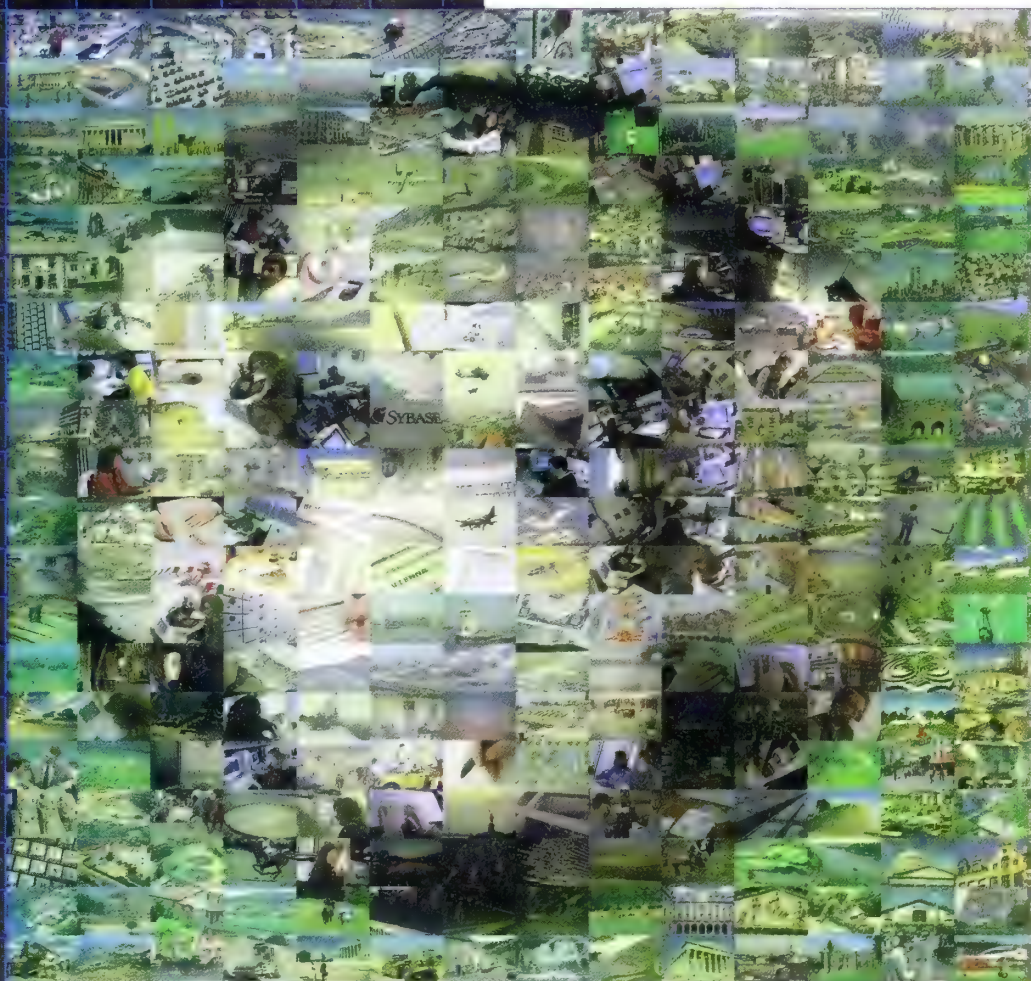
Broadcast.com dismisses most of these interlopers. Traditional players like NBC will never take the lead in new media that compete with their primary business, argues Cuban. And for now, deals for business services such as IntervU "are nothing more than gnats nipping around the edge," he boasts. Still, Broadcast.com says it expects to see a lot of days of not seeing anyone in the rearview are over.

By Steven V. Brull in Dallas



INFORMATION ANYWHERE™

MINUTES
AFTER THE
BRAZILIANS
FELL TO
FRANCE,
SO, TOO,
DID FOUR
GUINNESS
BOOK
RECORDS.



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THE WHITE HOUSE

MR. BOWLES LEAVES WASHINGTON

Clinton will miss his Chief of Staff. So will business

Erskine B. Bowles knows he has beaten the odds, and that makes him smile a bit as he recounts his adventures in Clintonland. A courtly North Carolina investment banker and Presidential golfing chum, Bowles sits in his White House Chief of Staff's office, his chronically sore back supported by a cushion, and makes mental lists of the things he did, or meant to do, in the service of Bill Clinton.

Though Bowles is too discreet to acknowledge it, his number one accomplishment has to be in spite of the Prez—leaving town with his reputation intact. On Oct. 30, he'll prepare to head home to weigh a run for governor after spending four years working for Clinton in jobs ranging from head of the Small Business Administration to White House Chief of Staff. Along the way, Bowles, 53, notched some key accomplishments: He put a chronically undisciplined President on a schedule, brokered a balanced-budget deal with



SIDEMAN: Bowles separated scandal from substance

Republicans, and kept the Administration's policy machinery running while the White House was rocked by scandals from Donorgate to the Lewinsky mess.

The buttoned-down Bowles was so

good at his job that he helped bring the curse—spawned by the misadventures of former staff chiefs Donald Regan and Clinton Arkansas Governor Thomas F. "Mack" McLarty III—down on many crackerjack business execs and dreadful White House managers.

The scion of a long line of politically connected Southern gentry, Bowles is an efficiency expert who ran a tight ship. But during Clinton's periodic scandal eruptions, his aide fastidiously avoided a public role, leading to some grumbling from Clinton loyalists that he was

MIA during Monicagate.

NO CAKEWALK. In his defense, Bowles says his desire to keep the White House from being paralyzed by scandal, plus his comfort with the role of TV sidekick, kept him in the background. "If we were going to deliver on the Presidential agenda, [Donorgate and the Lewinsky matter] needed to be segregated," he says. "I don't think we could have had a balanced-budget agreement or 100,000 additional teachers if we had been distracted."

But Bowles's desire to stick to the high road will be sorely tested in 2000, if, as some friends expect, he runs for governor of North Carolina, a state known for its rough-and-tumble politics. Political pros say that despite the fact that both his father and grandfather were prominent Democrats, Bowles won't have a cakewalk in Carolina. He's an unknown quantity to many voters and has never held elective office. Plus, the Clinton factor could be a drag. "There's a lot

BOWLES: THE EXIT INTERVIEW

ON CLOSING A DEAL IN WASHINGTON VS. THE BUSINESS WORLD

It's not a whole lot different...if I haven't done my homework, I'm going to lose. Also, time is a precious commodity here. In the business world, the time constraints are not quite so tight.

ON THE FAILURE OF FAST-TRACK

I made a mistake there. I so believed in the benefits of free trade that it was inconceivable to me that the opponents could mount a *jihad* against it....Had I understood the extent of the opposition, I would have gone for half a loaf instead of the whole thing.

ON THE FUTURE OF TRADE LIBERALIZATION

It's good, but some things will have to be done in order for fast-track-type legislation to pass. First, the business community is going to have to do more in terms of educating the public and their workers about the benefits of opening up markets and bringing down trade barriers. They have also got to be more flexible in the areas of labor and the environment. If you have some compromise that's not too extreme, then I think you could pass bipartisan legislation.

ON A TAX CUT Just speaking personally, I believe if you get Social Security reform, a tax cut should be

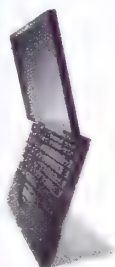
on the table. But it shouldn't come before, because it is an incentive for some people in the opposition party to come to the table.

ON HIS "MAN IN THE WHITE SUIT" IMAGE

If you ask Jesse Helms or Jesse Jackson about me, you'd probably get a similar report. I'm not the guy in the white suit. I've got plenty of mud splattered on me. I've survived 25 years in the business world. I've survived four years in Washington. I kept a good reputation, but I've taken some hits. I tried to do things right. [But] I'm not worried about taking a punch.

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antipathy for Bill Clinton in North Carolina," notes media consultant Don Ringe. "Bowles has a conservative demeanor, but I don't see how anybody could be Chief of Staff and not be aware of some of these things."

Bowles plans to sidestep the muck of Washington to spend most of his time expounding his New Democratic vision. If he runs, he'll trumpet his devotion to economic development, education, and high tech. "I'm not going to run if I have to run a negative campaign," he vows. "I'm also not going to be Don Quixote on some kind of damned white horse. If run, I want to win."

Bowles promises a decision by early next year. If he forgoes the race, he's

"Bowles has a conservative demeanor, but I don't see how anybody could be Chief of Staff and not be aware of some of these things"

DON RINGE, MEDIA CONSULTANT

likely to plunge back into the financial world. "A lot of people have talked to me about opportunities," he says, "from running a significant corporation to generating business for a large investment bank." Barring those moves, Bowles could return to Carousel Capital, the Charlotte-based merchant bank he helped start in 1996.

SHEDDING TEARS. No matter what path he takes, Bowles will be missed at Chez Clinton. With Treasury Secretary Robert E. Rubin also itching to depart in '99, the White House stands to lose its two most influential pro-business centrists. Incoming White House staff chief John D. Podesta, who succeeded Bowles on Oct. 20, is a traditional party activist who lacks Bowles's rapport with GOP leaders.

What concerns Clintonites even more is that the President is losing his chief confidant and one of the few contemporaries with whom he can relax. Among those shedding tears: business leaders, who found Bowles's fiscal conservatism reassuring amid a sea of Clintonesque good intentions. Bowles "did a good job in a very difficult time," says NationsBank CEO Hugh L. McColl Jr. "He didn't hide in a hole. He was able to stand above all the politics and just do his job." Not a bad testament for a former small-business financier who always considered Washington the last stop on the road to hell.

By Richard S. Dunham and Lee Walczak in Washington

Media

GERMANY

CAUTIOUS COMPANY, RISK-TAKING CEO

Bertelsmann's new CEO will keep up his dealmaking way

It was a joke, but it says a lot about the way Thomas Middelhoff views the status of Bertelsmann, the German media giant where he will take over as chief executive on Nov. 1. Recently, Middelhoff was at a party in New York hosted by Random House Inc., the U.S. book publisher Bertelsmann bought earlier this year, to mark the launch of a memoir by Walt Disney Co. chief Michael D. Eisner. "We'll make you famous," Middelhoff quipped to one of the world's best-known CEOs.

The subtext was serious: Bertelsmann is a global media powerhouse to rival heavy hitters such as Disney. Middelhoff, 45, is one main reason. The estimated \$1.5 billion Random House acquisition was one of a spate of deals he engineered as strategy chief under outgoing CEO Mark Wössner. Already in partnership since 1995 with Ameri-

ca Online Inc. to expand AOL's service in Europe, Bertelsmann on Oct. 7 announced that it will invest \$300 million in a 50-50 joint venture with Barnes & Noble Inc. to sell books online in the U.S. With AOL, it acquired CompuServe Inc.'s European division in February. It is also planning a joint venture in Australia.

Middelhoff has just begun making his mark on the company, based in Gütersloh, the north German town where it started out 163 years ago as a hymnal publisher. He is expected to run Bertelsmann until the company's mandatory retirement age of 60. Already, thanks to his dealmaking, no

TWO FRONTS

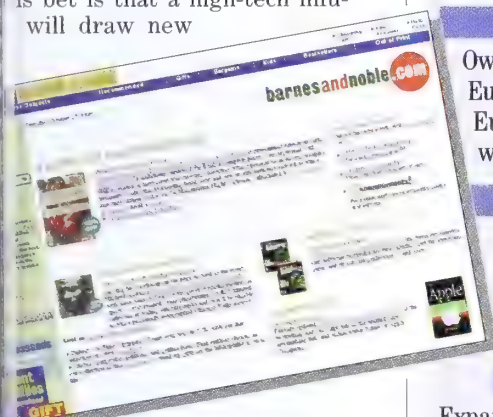
Middelhoff aims to boost U.S. sales while bringing the online revolution to the Old World

CASH FLOW FUNDED ALL HIS MOVES INTERNALLY



man sales account for 69% of Bertelsmann's \$14 billion annual total. OK at the big moves he has made before officially becoming CEO, you can just imagine what's in store now," says America Online CEO Stephen M. Case.

Much of what's in store is likely to be risky by the standards of privately held Bertelsmann. Middelhoff has been inclined to spend heavily on global expansion in slow-growth, often low-margin businesses that other media moguls shun, including books, magazines, and recorded music. Meanwhile, he is investing in state-of-the-art electronic media businesses, from Internet services such as AOL to a major digital TV joint venture in Germany. The bet is that a high-tech infusion will draw new



TIRELESS PURSUIT WON MIDDELHOFF A 50-50 JOINT VENTURE WITH BARNES & NOBLE

Adventures to Bertelsmann's mature businesses. But it also puts old-line Bertelsmann on a collision course with one of the hottest U.S. Internet playthings from Yahoo! to Amazon.com—to nothing of huge rivals ranging from Microsoft Corp. and Time Warner Inc. to America's national telecom giants. Nevertheless, the U.S. is Middelhoff's main target. His goal is to boost U.S. sales from 31% of Bertelsmann's total to 40% over the next few years. He has spent most of the past 16 months in Manhattan, working on his lavish and hobnobbing with media executives such as Advance Publications' S.I. Newhouse Jr., from whom he bought Random House. Bertelsmann is considering building a second skyscraper to house the book company, next to the 44-story tower already known as Times Square. "There's no question," Middelhoff, "that in 15 years, America will be far and away the biggest part of our country portfolio."

Further buyouts seem likely. Middelhoff is scouting for more magazines after the successful purchase and revamp of seven titles from The New York Times Co. in

How Middelhoff Is Building Up Bertelsmann

MUSIC

Boosting profits at the \$4.8 billion BMG while scouting for acquisitions.

BOOKS

Launching an U.S. online book venture with Barnes & Noble and a Bertelsmann online service in Europe. Buying other publishers.

INTERNET

Owens half of America Online's European service. Plans to double European unit of CompuServe, which it co-owns with AOL.

MAGAZINES

Scouting new magazine acquisitions in the U.S. Launching offshoots of popular European magazines.

TELEVISION

Expanding CLT-UFA, Europe's largest radio and TV group. Hopes to revive a German digital pay-TV venture with Kirch that was blocked by regulators.

DATA BUSINESS WEEK, COMPANY REPORTS

1994, but thinks valuations are still too high. He also wants to expand BMG, his \$4.8 billion music operation. One often-rumored target: London-based EMI Group PLC, whose stars include Garth Brooks, and which likely would go for at least \$5 billion.

Yet the acid test for Middelhoff's strategy will probably be in Europe, where the company generates 61% of its sales. He intends to import the on-line revolution to Old World markets that are far more reg-

**TONI BRAXTON
IS IN MUSIC
GROUP BMG'S STABLE**



ulated and far less wired than the U.S. With Amazon.com launching new European services, Bertelsmann is late to the party. "Their products will have to be excellent," says Thérèse Torris, an analyst at Forrester Research Inc. in Amsterdam.

But Middelhoff has several advantages over rivals. For one thing, as CEO of a private company, "he doesn't have to watch stock prices every day," notes Thomas E. Dooley, Viacom Inc.'s deputy chairman. Also, Bertelsmann generated nearly \$900 million in cash flow in the fiscal year ended June 30. That, plus \$500 million raised by selling off noncore assets, allowed it to fund all of Middelhoff's moves internally.

Financial clout lets Middelhoff pursue his goals stubbornly. He repeatedly courted Amazon.com CEO Jeff Bezos with offers of a partnership. After being rebuffed by Bezos and book retailer Barnes & Noble, he worked on launching his own service before persuading B&N chief Leonard S. Riggio to make a deal. Now, he will challenge Amazon.com in the U.S.

For all his dynamism, Middelhoff is imbued with Bertelsmann's conservative corporate culture. He has worked there for nearly his entire career, starting as a management assistant in 1986.

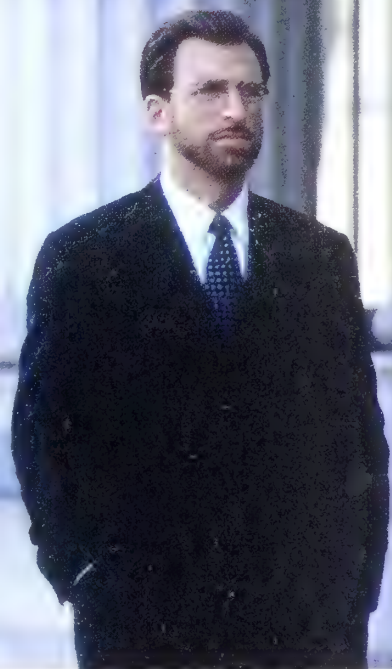
He lives with his wife and their five children on an estate about 20 minutes outside Gütersloh, along with dozens of peacocks, horses, and other animals. But he increasingly finds himself on airplanes. "He's perhaps the most global guy in our industry," says Viacom's Dooley.

The question is how far Bertelsmann's supervisory board will let Middelhoff ride with his strategy. The company says its multimedia ventures turned a profit on sales of about \$450 million in the last fiscal year. But if those profits dry up, resistance to his risk-taking could build. Some outsiders felt the board was sometimes reluctant to follow Middelhoff this far. "He's a very good [negotiator]," says Steven L. Rattner, the Lazard Frères & Co. deputy CEO who handled the Random House deal for Newhouse. "But we sensed at times that it wasn't easy." With ambitions as big as Middelhoff's, no one could expect it to be.

*By Thane Peterson
in Frankfurt, with
Richard Siklos
in New York*

MOGULS

WHEN WILL BRONFMAN HAVE TO FACE THE MUSIC?



Pressure mounts on the Seagram CEO as the Polygram deal and other moves fail to help the stock

On Nov. 4, Edgar Bronfman Jr. will be in Montreal for the annual meeting of the company that his grandfather Samuel founded and his father, Edgar Sr., expanded. For the fourth consecutive year, the New York-based Seagram Co. president and chief executive will talk about the dramatic transformation he is spearheading, moving Seagram out of the slowing drinks business into the hot field of entertainment. He'll argue that his latest moves—the sale of juice maker Tropicana Products Inc. to PepsiCo Inc. and the pending acquisition of music giant Polygram NV—will pay off big down the road.

If shareholders were antsy before, they may now be experiencing something like motion sickness. Buying Polygram for \$9.86 billion is only the latest—and biggest—in a

whirlwind of acquisitions and divestitures totaling \$42 billion that Bronfman has overseen in the decade or so that he has played a senior role at Seagram, taking over from his father as chief executive in 1994. Even as Seagram puts the final touches on the Polygram deal, it is lurching here and there, negotiating to sell its champagne brands, Mumm and Perrier-Jouet, and struggling to unload Polygram's film unit for extra cash. **SHAKEUP.** And Bronfman is not done yet. Entertainment-industry sources say that once the Polygram deal closes, Bronfman is considering a major overhaul of Seagram, reorganizing it into three separate operating units—music, films and theme parks, and the beverage

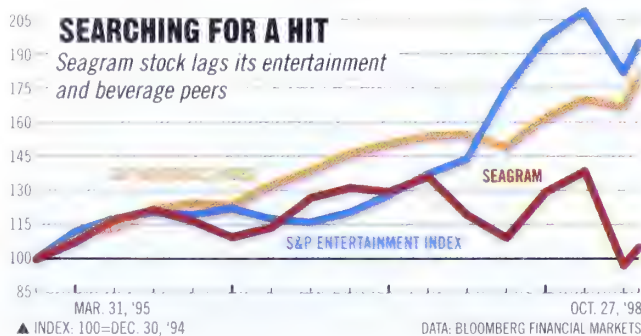
biz. Bronfman is **BRONFMAN:** He said to want to *unloading assets to raise cash* oversee all three divisions and will play an especially hands-on role in music. But such a move would likely duce the roles of two of his top entertainment executives—Universal Studios Inc. Chairman and CEO Frank J. B. Jr. and music chief Doug Morris. Bronfman were to split off the sudden larger music unit, that could force B. Jr. to leave as soon as the end of the year, predict executives who know him. While Bronfman may be hoping to stabilize he's taking charge, such a managerial shakeup could instead add to a growing sense of turmoil. Seagram and Unive-

declined to comment, citing the regulatory "quiet period" for stock they are issuing.

Could all these moves lock the value Bronfman keeps promising shareholders? At 43, he is the youngest of the global media barons, arguably, just getting warmed up. But there are growing questions about his ability to deliver. Seagram stock last month dipped below \$20 in depth it hadn't plumbed since

SEARCHING FOR A HIT

Seagram stock lags its entertainment and beverage peers



THE OTHER BRONFMANS ARE STIRRING

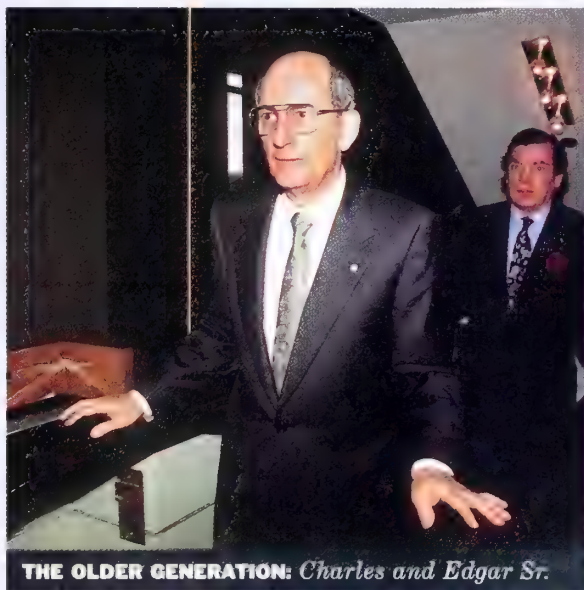
Edgar Jr. isn't the only Bronfman of his generation with a taste for the entertainment biz. The Seagram Co. chief executive's cousin Stephen Bronfman also has interests far beyond his family's roots in Canadian whiskey.

Montreal-based Stephen is being groomed to succeed his father, Charles R. Bronfman, at the helm of a diverse group of family enterprises—chief of which is their \$1.7 billion Seagram stake. To represent his interests and those of his sister, Ellen, Stephen is expected to eventually

held operator of cable specialty channels in Canada. Bronfman is also an investor in a concert-promotion business and a recently licensed wireless communications startup north of the border, Maxlink Communications Inc. One source says Bronfman is now working on a deal to invest in Toronto-based Imax Corp. that could involve helping it finance original productions for its big-screen and 3-D theaters.

FAMILY UNITY. In the style of his father, who maintains a low profile, Stephen, who associates says is 33,

did not return phone calls. But according to people who know him, the scion's main interests are sports, business, and philanthropic activities related to the environment. Apart from Seagram, Charles Bronfman's business interests are managed through his Montreal-based investment company, Claridge Inc. A staunch supporter of Israel, Charles counts as his biggest hands-on investment a 20% holding in Koor Industries, the



THE OLDER GENERATION: Charles and Edgar Sr.

join the Seagram board of directors.

When that happens, the family dynamic will be worth watching. Throughout their careers, Charles has deferred to his brother, Edgar Sr., when it comes to Seagram. But he has also expressed doubts about Seagram's move into entertainment, according to Edgar Sr. One possible sign of his displeasure: Charles has sold 2.5 million Seagram shares in the past two years—though, admittedly, that's only a fraction of the 55 million his family still holds. Combining those shares with Edgar's family's 62 million, the Bronfmans own 34% of Seagram, which will be diluted to 29% when the Polygram acquisition closes.

Meanwhile, Stephen is becoming a growing presence in Canadian media circles. He is deputy chairman and 23% owner of Toronto-based Netstar Communications Inc., a privately

largest conglomerate in Israel.

As Charles, 67, and Edgar Sr., 69, pull back from the business their father founded, Edgar Jr.'s relationship with Stephen and Ellen will be as critical as his rapport with his own siblings. When asked about family unity earlier this year, Edgar Sr. noted that the company had recently reconfigured its executive committee to ensure that Charles's side has equal say. "We are now starting to recognize that there are two families involved here: my brother's family and my family," he said.

According to Netstar Chief Executive Gordon Craig, relations between Stephen and Edgar Jr. are "very positive and reasonably close," and the two talk at least once a week. These days, there is surely much to talk about.

By Richard Siklos in New York

man steered the company headlong into Hollywood in 1995. And despite a reuptick to \$30, the stock has undermined the Standard & Poor's index—both entertainment and beverage companies (chart). "As much as I like Edgar Jr., there is no clearly articulated plan," says Porter Bibb, an investment banker at Ladenburg, Thalmann

ETIC AGENDA. Next on Bronfman's tic agenda is to persuade skeptics seeing the leader in the music industry makes sense. Indeed, when the closes later this month or early Universal will command a 22% market share, surpassing Sony Entertainment Inc. at 17%. Cermusic is a business that can generate cash flow without the up-front costs of movies or theme parks. Analyst Alan Kassar at Deutsche projects that music alone will generate 43% of Seagram's \$2.38 billion in earnings before interest, taxes, depreciation and amortization in the year ending June 30, 1999. But sales growth has been modest, and Bronfman has pinned hopes on new markets in the volatile emerging world and on uncertain new technologies and the Internet.

He also has to wrestle with higher costs, which will balloon 150%, to \$9.5 billion. To that end, Bronfman aims to raise as much as \$300 million a year in 1999 by pooling Polygram's resources with Universal Music. Merrill Lynch & analyst Jessica Reif Cohen anticipates a \$600 million charge this quarter, tied to the Polygram deal.

A piece of cold comfort for Bronfman: Seagram's slumping stock has effectively reduced the Polygram purchase price from \$10.4 billion to \$9.86 billion. Because Royal Philips Electronics, 50% owner of Polygram, agreed to swap some Seagram stock in exchange for a music unit. At current levels, the value of shares to be issued to Philips would be worth 27% less than when they were fixed at when the deal was struck in May.

Of course, Bronfman also knows what not to sell too soon. Still haunting him is the 1995 decision to unload Seagram's 24% holding in DuPont Co. for \$1 billion, parlaying it into what is now an 84% stake in Universal. As few investors have forgotten, that deal at stake would today be worth \$1 billion.

Similarly, a \$1.8 billion paper gain on Seagram enjoyed on the complex Polygram deal cut with old friend Bardar's USA Networks Inc. a year ago has shrunk to about \$400 million. In that deal, Seagram contributed 50% of Universal's TV operations, including the USA Networks cable channel,

but received a 46% stake in a bigger TV operation with rights to buy it back when Diller retires. But the more immediate effect was to marginalize Universal Chairman Biondi, who wasn't apprised of the Diller deal until just before it was announced. "Frank says all the right things, but you see the pain in his face," says a top media executive who knows him well.

BOX-OFFICE DROUGHT. As for Bronfman, one friend who met with him recently says: "He doesn't have the same bounce in his step he seemed to have a year ago." But don't count the part-time lyricist out yet. Some of Seagram's operations may have hit bottom, including its Asian liquor business and its flagging film studio. In a drought since the 1997 hits *Liar Liar* and *The Lost World: Jurassic Park*, Universal Studios has eked out only a 4.2% box-office share—last place among the majors. Still, Larry Haverty, senior vice-president of State Street Research Inc. in Boston, predicts Universal is poised for a turnaround, with a sequel to the hit pig movie *Babe* in the offing, as well as *Patch Adams*, a Robin Williams feature generating strong advance buzz.

Haverty also likes the investments Universal has been making in its theme-park business; it is expanding its Universal Studios attraction in Florida and recently broke ground on a park in Osaka, Japan. "It reminds me of when Rupert Murdoch nearly went bankrupt 10 years ago," says Haverty. "He didn't have a lot of friends, but he was on the verge of a turnaround."

Bronfman could do worse than being compared with Murdoch. One key difference, though, is that Bronfman's control over Seagram is not absolute. He, Edgar Sr., and related family trusts control 18% of Seagram's stock. That, combined with the 16% owned by Edgar Jr.'s uncle Charles, gives the Bronfmans control of the company. If Bronfman can't improve Seagram's performance, the stockholders to whom he is most closely accountable—his own family—could grow restless, especially his Canadian cousins (page 149). "There is a lot of dissension among the family," claims Bibb, who is also penning a biography of the Seagram chief.

Bronfman cannot have lost sight of his family's expectations. In February, 1996, at one of his first appearances after buying Universal, he joked that "the speech I want to give you is about three years away." He added: "I hope I'm around long enough for you to invite me back." As the remaking of Seagram rambles ahead, Bronfman may soon be asking for still more time.

By Richard Siklos in New York, with Ronald Grover in Los Angeles

The Corporation

STRATEGIES

FLY, DAMN IT, FLY

A new Boeing crew tries to navigate a turnaround



CEO COULD PUT NEW EXES IN CHARGE THREE U

BACK TO THE HANGAR Boeing execs say they have production

FIX PRODUCTION FOR GOOD Boeing has unknicked the snarls that plagued its Seattle factories for the past year. But computer systems that were supposed to streamline purchasing and production still aren't in place, and costs remain above historic levels. Fixing those problems is Job No. 1 for new management.

MAKE UP WITH SUPPLIERS During ramp-up, Boeing stretched suppliers' extravagant demands for parts and materials—and then lured away many of their workers. Now, it is trying to turn those companies more like partners, including them on decisions and long-term contracts.

Since Alan R. Mulally was named president of Boeing Co.'s commercial airplane unit on Sept. 1, he has conferred with his top 14 managers every Thursday morning for hours. The meetings move from one plant to another, but the agenda remains the same: fixing Boeing. The managers aren't jawboning about vision statements. They're poring over production numbers and cost reports, trying to drive operating margins of Boeing's largest business from near break-even to 8% or more. Mulally repeats the same mantra at each meeting: "The data will set us free."

That focus on numbers is a novel and long overdue change in Boeing's hide-bound culture. Underlying its well-publicized travails—staggering production snafus and cost overruns that led to big losses despite a record boom in orders—are much deeper problems. In an era when price and efficiency are king, the company is saddled with bureaucracy, redundant processes, and antiquated information technology. "Boeing has not changed very much since World War II," says Bill Whitlow, investment manager for SAFECO Northwest Fund, holder of \$2.7 million in Boeing stock. Adds Paul H. Nisbet, president of aerospace

analyst JSA Research Inc.: "Boeing needs a thorough scrubbing of its operations from top to bottom."

Now, after a management shakeup at its August board meeting, the scrubbing has begun in earnest. The reorganization came in the wake of \$4.45 billion in writedowns over the past 18 months and net profits of only \$308 million—or less than 1.2%—on first-half 1998 revenues of \$26.3 billion. Boeing was split into three units—commercial, defense, and space—and the former head of commercial aircraft was forced out. New executives are now in charge of the units, including two who aren't Boeing lifers. That's almost unprecedented, and reflects how far Chief Executive Philip M. Condit, 57, and Chief Operating Officer Harry C. Stonecipher, 62, are willing to go.

They don't have much choice: Their own jobs are on the line if they can't end Boeing's seemingly endless litany of troubles. One Boeing director says privately that the pair still has board support. But Peter L. Aseritis, an analyst with Credit Suisse First Boston Corp., figures the board will give Condit a nine-month grace period before "taking him by the scruff of the neck and throwing him out the door."

Those nine months will go by fast. Condit and team say they are on the verge of fixing the bottlenecks that have slowed airplane deliveries and hammered profits. Facing enormous pressure to deliver airplanes on time, Boeing execs say they have to focus first on getting products out the door. "We have to get productivity back to the levels we've had before, and then redesign the process to take more cost out," Condit says. But beyond that, the plan Condit has spelled out is a course of incrementalism. And so far, it's lacking in details. The broad outlines: complete stalled plans to modernize the computer systems used to produce planes, trim tens of thousands of jobs, and remake relationships with Boeing's enormous supply chain.

Will it be enough? As long as Boeing continues to beat profit estimates, as it did for the third quarter, Wall Street seems to be regaining patience. Boeing's turmoil battered its stock by 50%, from 60¢ in July 1997 to 30¢ last August. But since the reorganization, it has recovered 16%, to around 35¢. "They've bought themselves some time," says investor Robert Finch, whose Aeltus Investment Management in Hartford, Conn., holds \$4.6 million in Boeing shares. The reorganization, he says, shows the company is "paying attention to the bottom line."

Certainly the changes come none too



ALAN R. MULALLY: HIS
COMPANY IS
TURNING UP
THE ACTION

control, but more steps are needed to assure long-term health

ON-DEMAND DELIVERIES Given the state of the economy, Boeing needs to take a hard look at its goal of making 620 airplanes a year. If Boeing can persuade customers to accept delayed deliveries, it will gain some breathing room and hold on to the orders backlog, when annual deliveries drop to 400.

DEAL WITH UNNEEDED ASSETS By 2001, all commercial McDonnell Douglas lines will have been shut down in Long Beach, Calif. The 100-seat 717 won't generate enough volume to carry the facility. Boeing needs to pare away or redeploy excess personnel and facilities like Long Beach that it acquired through mergers.





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soon. A redesign actually has been under way for five years, but it was seriously sidetracked by Boeing's production push. The process began in the early 1990s, during the trough of the last business cycle, when Boeing unveiled an ambitious plan to streamline aircraft assembly. But when business took off in 1995, Boeing focused on grabbing as many orders as it could. Management had been shocked the year before when its arch-rival, the European government-subsidized Airbus Industrie consortium, outsold it for the first time. To protect share, Boeing launched an all-out war, with discounts as high as 25%, analysts say.

Boeing won the battle, but ended up with a bulging order book of lowballed planes. Scaling up production to build all those planes sent costs soaring. That's why analysts expect the commercial airplane group, which lost \$1.8 billion after charges in 1997, to end this year some \$61 million in the red. "I'm convinced it was one of the most dysfunctional maneuvers in the history of American business," says Richard Aboulafia, director of aviation consulting for Teal Group Corp.

HOMELESS PLANES. Boeing is still digging out. Its anemic net margins, which are expected to be 1.7% this year, will creep up to 3.4% in 1999, analysts predict. Even customers are feeling the cost-cutting push; Boeing, for example, now makes them pay for nonstandard features on planes. In early October, both United Airlines Inc. and United Parcel Service Inc. complained to Boeing that it was balking at making minor fixes to planes they had ordered. After a heated meeting on Oct. 8, however, United went away satisfied. "I am very, very positive about the steps they are



ORDER BOOM: Cost overruns put a lid on Boeing's profits from aircraft sales

taking," says Andrew P. Studert, a senior vice-president for United parent UAL Corp.

Customers and investors are pinning their hopes especially on Stonecipher. The hard-nosed former CEO of McDonnell Douglas Corp., who arrived in 1997 with Boeing's \$16.3 billion acquisition, has already instilled a more by-the-numbers approach. He pressed Boeing, for the first time, to provide earnings guidance to Wall Street. And he supported Mulally's plan to push profit and loss responsibility down to individual plants, another first.

Still, any fixes could be swamped by worldwide economic problems. As America's largest exporter, Boeing is especially vulnerable to turmoil in Asia, where it sells a third of its commercial planes. Even as it gets production back on track, 34 finished aircraft are parked in the Arizona desert, unclaimed by strapped airlines such as Garuda Indonesia and Philippine Airlines. Condit himself now admits that earlier estimates of Asia's impact on orders may have been too low.

Those undelivered planes weigh heavily on the balance sheet, and Boeing can't turn off its production spigot quickly. Indeed, the company is still planning to raise output to a record 51 planes a month in the first quarter of 1999 be-

cause it has to meet longstanding delivery commitments. Yet it told analysts Oct. 22 that up to 15% of output for the next five years, or more than 120 planes, may go homeless, pending financing deals or resale to other airlines.

Longer term, Condit may take a cold look at demand for aircraft. He still holds forecasts that the global market will demand new planes at an average annual rate of 8% of the world's fleet

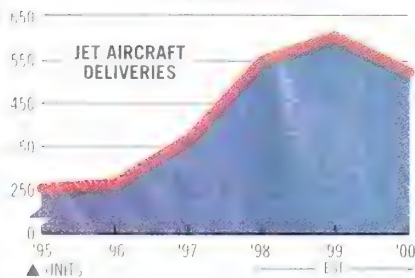
the next 20 years—5% growth and replacement. But analysts and customers say that may be high. "Boeing is like a huge freight train that takes a couple of miles to slow down," John Plueger, co-chief operating officer of International Lease Finance Corp. "They have to talk to their customers now about deferrals." On Oct. 22, Malaysian Airlines became the last Asian carrier to back out, delaying planes worth \$2 billion.

Boeing's challenges aren't borne only by the commercial-airplane division, which accounts for 64% of revenue. In the defense arena, executives must figure out how to hike revenues while military budgets shrink. Indeed, some production lines could shut down in years if new orders don't appear in the U.S. or abroad. And in the fast-developing space and communications business, a run of bad luck and heavy research spending are holding margins less than 4% (page 156).

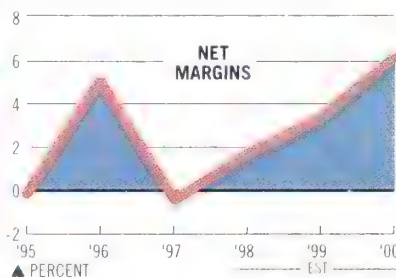
The new management team has a healthy dose of non-Boeing blood. The commercial airplane group, based in Seattle, is now under Mulally, 52, previously headed Boeing's Information Space & Defense Systems group. The group is now split in two: Michael Sears, 51, a veteran McDonnell Douglas exec, runs the defense operation of McDonnell's old St. Louis home. James F. Albaugh, 48, who came to Boeing when it bought Rockwell International Corp.'s space business in 1996, heads space and communications in Southern California.

All three need to boost profit margins, but Mulally faces the toughest. So far, though, his plans are short-term specifics. Clearly, first priority is to clean up Boeing's production process. Once parts are all arriving on time, workers are better trained, he'll focus on cutting costs. "We have another year to go before we get back to efficient levels we had before we traumatized

AS PRODUCTION LEVELS OFF...



...BOEING'S PROFITS SHOULD IMPROVE



DATA: CREDIT SUISSE FIRST BOSTON CORP.



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the whole system," he concedes.

Aside from tweaking the production flow, the only ways he can lower costs now are automation and layoffs. Both are already under way. Boeing has said it aims to cut total payroll, now at 235,000, to as low as 210,000 by the end of 1999. For a change, much of the pain could fall to white-collar workers, not to the factory staff Boeing needs to get planes out the door. Pink slips have already gone out to 1,100 employees. But analyst Nicholas P. Heymann of Prudential Securities Inc. thinks Boeing might have to cut as many as 70,000 people.

The automation problem is even more nagging. Boeing is one of the world's largest users of information technology, but it hosts a bewildering array of 400 systems. Data are so diffused that Boeing can't centralize procurement of the millions of parts used across its product line: An identical part may be manufactured in-house for one airplane and outsourced for another. Boeing is putting in place a new \$1 billion system that ties together all its old computers, but it has ballooned in complexity and now won't be fully operational until after 2000.

PROCUREMENT OVERHAUL. With good systems in place, Mulally should eventually be able to better track inventory and forecast demand for parts. Even so, Boeing is years behind Airbus in electronically managing its supplier relations, a crucial step that saves costs on both sides. And software alone won't make partners of suppliers, many of whom felt burned by Boeing's extravagant demands for parts and raw materials during the production surge. For that, Boeing is overhauling procurement, forging long-term deals like the 10-year, \$4.3 billion contract it announced Aug. 31 to buy aluminum from just five firms instead of the previous 50. Top suppliers invited to a two-day Boeing schmooze-fest in early October say they were impressed by the company's new focus.

Still, Boeing has to prove it can keep that focus, even as boom times come to an end. But the economic crisis could have a silver lining: Order deferrals from carriers could help Boeing smooth the peaks and valleys of the cycle. "Just about the time we need another good kick, [Asian carriers] are going to be ready to go again," says Condit. "That'll help us carry on long-term." Assuming that by the time orders pick up again, Boeing has learned how to build planes for a profit.

By Andy Reinhardt in San Mateo and Seanna Browder in Seattle, with bureau reports

A SPACE VENTURE THAT'S SPUTTERING

It wasn't supposed to work out this way. When Boeing Co. bought McDonnell Douglas Corp. and Rockwell International Corp.'s space and defense unit in 1996, the Seattle-based company's goal was to meld an assortment of products and services—rockets, satellite vehicles, launch operations, and electronics—into an entity that would dominate commercial and government space programs. Boeing wanted to grab hold of an industry set to blast off—and one able to balance the ebbs and flows of commercial aviation.

Oops. The strategy was valid, and the company is indeed No. 1 in space. But the past year has been nearly as trying for Boeing's \$5.5 billion space operation as it was for the \$26.9 billion commercial-airplane unit. At fault are geopolitics, unproven technology, and a remarkable run of bad luck. James F. Albaugh, the new president of Boeing's Space & Communications group, insists he will hit 1998 revenue and profit targets. "But it could have been better," Albaugh concedes.

What went wrong? Just about everything imaginable. Boeing's prized new Delta III rocket blew up on its maiden flight on Aug. 26, taking with it a \$225 million PanAmSat Corp. satellite. Overconfidence lured Boeing into taking the risky step of carrying a live payload on the maiden voyage. The quirky Sea Launch program, which aims to loft rockets from a platform in the Pacific Ocean, is a year behind schedule because of difficulties coordinating with Ukrainian, Norwegian, and Russian partners. Boeing was outbid by Lockheed Martin Corp. on a \$4 billion contract to manage NASA's

ground operations. And the International Space Station, for which Boeing is the prime contractor, has been delayed by economic turmoil in Russia, where the main control module is being built.

"ENVIRONMENT OF EXTREMES." As troubling as these setbacks are, analysts say that they're unsurprising. "Space is an environment of extremes," notes Brett Lambert of Washington-based researcher DFI International. Boeing certainly isn't

alone: A Lockheed rocket blew up just weeks before the Delta III explosion, for instance. And the news isn't all bad. On Oct. 16, Boeing bested Lockheed to win a \$1.38 billion Air Force contract to launch a new generation of rockets.

Indeed, Boeing remains bullish on space despite all of its snafus. From about \$40 billion this year, the industry could hit \$150 billion in a decade, thanks to the global communications-satellite boom. Boeing has its hands in many of the key programs, as both an investor and a contractor, including the

ambitious Teledesic Corp. "Internet in-the-sky" venture backed by Craig O. McCaw and William H. Gates II.

Boeing's biggest challenge in space will be to drive down costs as relentlessly as it must in its jet airplane operations. "This is going to be a classic commercial business," says CEO Philip M. Condit—a far cry from the cushy government work of the past. Albaugh thinks that the space group can earn margins of 10% within five years. But with margins now less than 4%, Boeing has a ways to go before space takes its profits into orbit.

By Andy Reinhardt in San Mateo, with Seanna Browder in Seattle



BLOW-UP: Boeing's Delta III rocket exploded after liftoff

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\$3,299*

Leasing price: \$111/month¹

- Mobile Intel Pentium II Processor 266 MHz
- 4.1 GB² SMART Hard Drive
- 32 MB RAM (expandable to 160 MB)
- 12.1" CTFT SVGA display
- 512 KB L2 Cache
- Optional CD-ROM or DVD via Mobile Expansion Unit
- 4.4 lbs. and 1.3" thin
- Magnesium display for durability
- 3-year limited warranty⁷

Options

Armada 1573:

- Convenience Base (pass-through): **\$189***
- Additional Li-Ion battery: **\$189***

Armada 1700:

- Compaq Value Case: **\$49***
- 32 MB Memory Module: **\$95***

Armada 3500:

- Mobile Expansion Unit 24X Max³ CD: **\$199***
- Mobile Expansion Unit with DVD: **\$399***
- Additional Li-Ion battery: **\$209***



Small Business Solutions

B

\$499*

Price: \$84/Month¹

Intel Pentium Processor with
 4X™ Technology 233 MHz
 SMART Hard Drive
 RAM
 CTFT SVGA display
 24X 56K modem⁴, 24X
 CD-ROM, and AC Adapter
Office 97
Business Edition⁵
 Free Internet access
 through GTE⁶
 3-year limited warranty⁷

Deskpro EP 6300X/4300/CDSM

\$1,699*

Leasing price: \$57/Month¹

- Intel Pentium II Processor 300 MHz
- 4.3 GB² SMART II Ultra ATA Hard Drive
- 32 MB SDRAM
- S700 Color Monitor
- ATI RAGE IIC AGP 64-bit Graphics Controller with 2 MB VRAM
- 24X Max³ CD-ROM
- 56K Data/Fax modem⁴
- **Microsoft Office 97 Small Business Edition**⁵
- 3-year limited warranty⁷

ProSignia 200 6/300

\$4,719*

Leasing price: \$157/Month¹

- Intel Pentium II Processor 300 MHz
- 4.3 GB² Wide-Ultra SCSI-3 hard disk
- 64 MB ECC Memory (upgradable to 384 MB)
- 4/8 GB SLR enterprise-class tape drive
- **Microsoft BackOffice**[®]
- Insight Agent Events Notification Tool detects potential server issues
- 3-year on-site limited warranty⁷

Options

Deskpro EP Series:

- Additional 32 MB SDRAM Memory: **\$99***
- Upgrade to Compaq 19" monitor: **\$220***
- SuperDisk LS-120 Drive: **\$119***
- Compaq C-Series 810 Handheld: **\$499***

Armada SB:

- Armada 1700/3500 Convenience Base (pass-through): **\$189***
- Additional Li-Ion battery: **\$195***

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HOW LONG-TERM ROCKED STOCKS, TOO

It wasn't just the bond market that LTCM endangered

It's widely believed that Long-Term Capital Management nearly collapsed because of huge bond trades.

But that's only part of the story. Equally important were its gargantuan equity positions. What really shocked and alarmed Wall Street banks and brokerages was the havoc that an LTCM collapse would wreak in the stock market. "We were most concerned about the equity book," says Jon S. Corzine, chairman, Goldman, Sachs & Co., referring to LTCM's equity holdings.

Wall Street execs who attended meetings at the New York Federal Reserve before the Sept. 23 bailout were startled at the enormous size of many of LTCM's equity positions. While each firm that traded with LTCM knew about its own positions, it was unaware of the extent of LTCM's trading with others. "We knew about the fixed-income positions. We had no idea about the equity," says another banker involved in the \$3.6 billion bailout. "That's what scared Wall Street." Another top banker put it this way: "It was a hand grenade ready to explode."

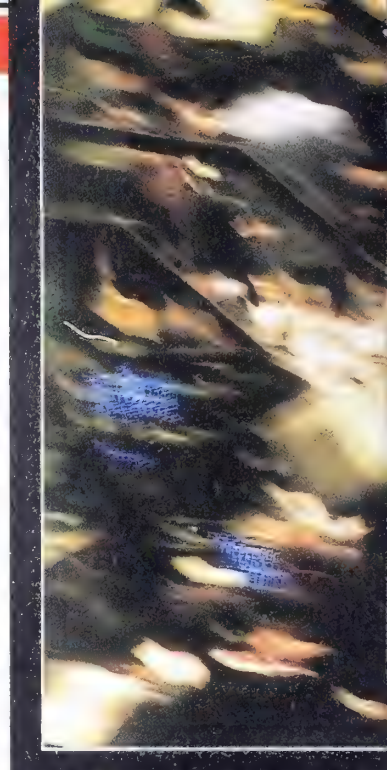
The hedge fund was deeply involved in three types of equity trading: "pairs" trading, risk arbitrage, and bets on overall market volatility. A major Wall Street firm says that LTCM's arbitrage positions in merger stocks alone, called risk arbitrage, reached \$6.5 billion, and LTCM's positions in individual takeover stocks were 5 to 10 times as large as this Wall Street firm's own arbitrage positions. Some pairs-trading positions were even larger.

Of most concern was a massive \$2.3 billion position in Royal Dutch Petroleum and Shell Transport, two closely related stocks. This position is called a pairs trade, or an arbitrage between two stocks, often in the same industry, that usually move closely together but sometimes diverge. Shell Transport owns 40% of Royal Dutch/Shell Group, while Royal Dutch Petroleum owns 60% of Royal Dutch/Shell Group. Both get their income from dividends from Royal Dutch/Shell Group.

Historically, Shell had sold at an 18% discount to Royal Dutch. When the discount rose above that, LTCM bet that Shell was cheap compared to Royal Dutch. So LTCM effectively bought shares of Shell Transport and simultaneously sold shares of Royal Dutch. The idea: If oil stocks moved up, Shell would rise more than Royal Dutch, and if oil stocks moved down, Shell would fall less than Royal Dutch. Instead, the stocks diverged even further.

FORCED SELL. David H. Komansky, chief executive of Merrill Lynch & Co., feared that if LTCM had to liquidate its huge Shell position as well as its other equity positions, it would roil the prices of the two oil-company stocks as well as the overall stock market. Says Komansky: "That whole potential scenario of unwinding their equity portfolio under a forced environment could have had extremely negative consequences on the [overall] market."

The dangers to the market were exaggerated by the way LTCM executed its positions. Rather than going the traditional route—buying stocks and selling stocks short—LTCM entered into total-return swaps with the Wall Street firms. This did two things: It allowed LTCM to pump up its positions using leverage, and it shifted much of the risk from



LTCM to its trading partners—the Wall Street banks and brokerages.

Here's how a total-return swap works in risk arbitrage: LTCM wanted to capitalize on the discrepancy between prices of two companies that had announced a merger, say, Citicorp and Travelers (table). Based on the merger terms, Citicorp is underpriced relative to Travelers. Rather than buying Citicorp stock, LTCM buys a total-return swap from the bank. The bank agrees to pay LTCM the total return on Citicorp stock—the stock's appreciation and the dividend. If Citicorp declines, LTCM must pay the bank the decline in the stock price.

In effect, this allows LTCM to own Citicorp stock without putting up a penny's margin. But the bank that sold the swap must buy Citicorp stock to hedge its position against a rise in the stock price. If

Why Total-Return Swaps Scare Wall Street

This example demonstrates how banks and brokerages would have faced huge equity losses if LTCM had defaulted



THE DEAL

Under the proposed merger of Citicorp and Travelers, each Citicorp share will be exchanged for 2.5 shares of Travelers. On June 1, for example, Citicorp stock was selling for \$153 a share, while Travelers traded at \$63, a ratio of 2.43 to 1. Each Citicorp share should be selling for \$1



Long-Term Capital Management pumped up its profit potential via leverage while shifting the risk to its trading partners—Wall Street banks and brokerages

falls, the bank goes back to LTCM asks for its money. The problem hat LTCM was fast running out of y. The bank was left with positions vere hard to unwind.

BET. Since LTCM had its near-death ience, it has liquidated much of its rbitrage portfolio, says a source to LTCM, though it still has some of rs trades. But Wall Street remains ed by the bets LTCM still has on et volatility, the third string in equity-trading bow.

M was wagering that the swings in ock market, which had become ide, would revert to a more nor-almer pattern. How does one make et? Generally, the more volatile a the more expensive the puts (bets r price decline) and calls (bets on a ncrease). Similarly, the more

volatile the overall stock market, the higher the prices of the puts and calls on the stock indexes.

Early this year, LTCM was convinced that volatility was abnormally high. To LTCM, that meant that the puts and calls on the indexes were overpriced. The firm sold puts and calls on stock indexes to Wall Street firms, betting that volatility would decline and so, too, would the prices of these options. In the lingo of the Street, LTCM was "short volatility." But the opposite happened: Instead of volatility declining, it reached record levels. And LTCM had to put up more collateral to cover its losses and maintain its put and call positions.

LTCM's foray into U.S. equity arbitrage began in 1995, only a year after the firm was started. LTCM's partners believed their bond expertise was trans-

ferable to stocks. "They didn't think of themselves as just fixed-income people," says someone close to LTCM. The partners thought they could earn attractive returns and that such a move would provide diversification. And conceptually, stock arbitrage was similar to what the firm was already doing in bonds. LTCM would go long one bond and short another bond in the expectation that the spread between the two bonds would converge to its historical relationship.

LTCM never hired an experienced equity arbitrager, say sources close to the firm. Instead, LTCM partner Lawrence E. Hilibrand headed the hedge fund's move into equity arbitrage. Hilibrand made his name as a quantitative expert on mortgage-backed securities as head of Salomon Brothers Inc.'s bond-arbitrage group. LTCM was soon doing complicated

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Travelers. Instead of buying Citi-
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rees to pay Firm X a fixed interest
exchange. And LTCM shorts Travel-
t Firm X but through its account at



THE SAFETY NET

Firm X hedges itself by buying 1 million shares of Citicorp stock at \$153. This way, if Citi goes up, Firm X's profits on its Citi shares offset its payments to LTCM. If Citi declines, Firm X's share losses are offset by payments from LTCM (since Citi's total return is negative).

THE BLOWUP

By Sept. 23, Citi's stock has declined to \$95 a share. Under its swap

arrangement, LTCM posts \$58 million with Firm X to cover the losses. But if LTCM defaults, Firm X is left with its Citi stock and no offsetting short position in Travelers stock since LTCM did the short trade with Firm Y. Firm X would be forced to dump Citi stock in a declining market.



trades, such as going long a basket of 30 stocks of target companies and short a basket of the 30 companies that were expected to acquire them. Stock arbitrageurs gradually became aware of the new 800-pound gorilla on the block. "Their whole m.o. was to take a relatively risk-free deal and lever it up," says one arbitrager.

For several years, risk arbitrage was profitable for LTCM, as was pairs trading and volatility. But in 1998, the

world changed. In August, the firm got hit with massive losses in its fixed-income positions and in its various equity positions. LTCM was forced to liquidate its risk-arbitrage positions to meet margin calls. It's still holding its Shell position and its volatility trades, which are more difficult to unwind. That's why Goldman Sachs, one of six main firms managing the bailout, chose J. David Rogers, the head of its global equities trading, instead of a debt spe-

cialist, to sit on LTCM's oversight committee.

Since the bailout, equity markets improved, and prices are less volatile than in August and September. That may have helped LTCM, even though Oct. 27, it laid off one-fifth of its staff. But if the markets convulse again, LTCM will have to come back to Wall Street for another transfusion.

By Leah Nathans Spiro, with John M. Laderman, in New York

UBS FAILED RISK MANAGEMENT 101

In a world where investors large and small try to manage risk, you would think UBS, Europe's largest bank, would have the resources and the smarts to do it right. Instead, when it came to the bank's dealings with Long-Term Capital Management, it was amateur night in Zurich.

The blunders cost about \$700 million and four top executives—including Chairman Mathis Cabiallavetta—their jobs. The bank has acknowledged "shortcomings" in risk management. In fact, there was no risk management at all. Spokesmen for the bank declined to comment beyond their press releases.

But based on what the bank has disclosed, and on interviews with derivatives specialists and with sources close to Long-Term Capital Management, here's what happened. In the summer and fall of 1997, UBS sold LTCM's managers a series of call options on shares of their own fund. The options allowed the LTCM managers to benefit from the rise in the value of the fund over the next seven years without actually owning it.

TAX ANGLE. It's the same thing as an investor who is bullish on IBM buying an option on Big Blue stock. If the stock, now at 146, goes up to 200 during the life of the option, the owner sells the option and pockets the \$54-a-share difference. With LTCM, the options covered shares worth about \$800 million at the time UBS issued them. If the hedge fund prospered and the value of the options' underlying shares rose to say \$4 billion, the managers could sell the options and profit from the difference between the \$800 million original value and the \$4 billion that they would now be worth—a \$3.2 bil-



LTCM GAMBLE: UBS had over \$1 billion at risk in the fund—and didn't hedge

lion profit. For these options, LTCM managers paid UBS \$266 million.

Why would the hedge fund's managers purchase call options on their fund instead of just putting the money in? For one, the options gave them three times the leverage of a conventional equity stake. If you're expecting to make a bundle, that magnifies the winnings. There's a tax angle, too. If the managers sold appreciated options before expiration, their gains would be taxed at the favorable long-term capital-gains rate. Had they invested that money in the fund directly, it would likely be generating short-term gains, taxed at much higher rates. That's the reason these sorts of options are often pur-

chased by hedge-fund investors.

But UBS' behavior was anything but typical. True, the bank invested \$800 million in LTCM to assure that could make good on the options. But most banks would have pocketed the \$266 million fee. Instead, UBS rolled the dice. It had so much faith in the gurus of Greenwich that it invested its fee in the hedge fund, putting a total of more \$1 billion at risk in LTCM. What the bank failed to do was to protect itself against a decline in the value of LTCM. It violated the first rule of risk management—downside protection.

Some options traders say it is likely UBS never planned to protect its downside. "The bet was that LTCM would be worth more in seven years than it was today," says one specialist. "That probably looked like a bet that didn't need hedging."

Most pros can hardly believe that UBS would have made such a one-sided bet. Robert N. Gordon, president of Twenty-First Securities Corp., says his firm would have required the LTCM managers to sell put options that go up in value as the underlying shares go down. With put options, the bank could have protected some of its downside by forcing LTCM to buy back the shares at a price that would have prevented too great a loss. "I can't believe UBS didn't demand puts," says Gordon.

Of course, had UBS tried to exercise those puts, the financially bludgeoned LTCM managers may have come up short in buying them out. But at least the experts at UBS could have argued there was some risk management in place.

By Jeffrey M. Laderman, in New York

COINCIDENCE— OR COLLUSION?

academics question the standard 7% IPO fee

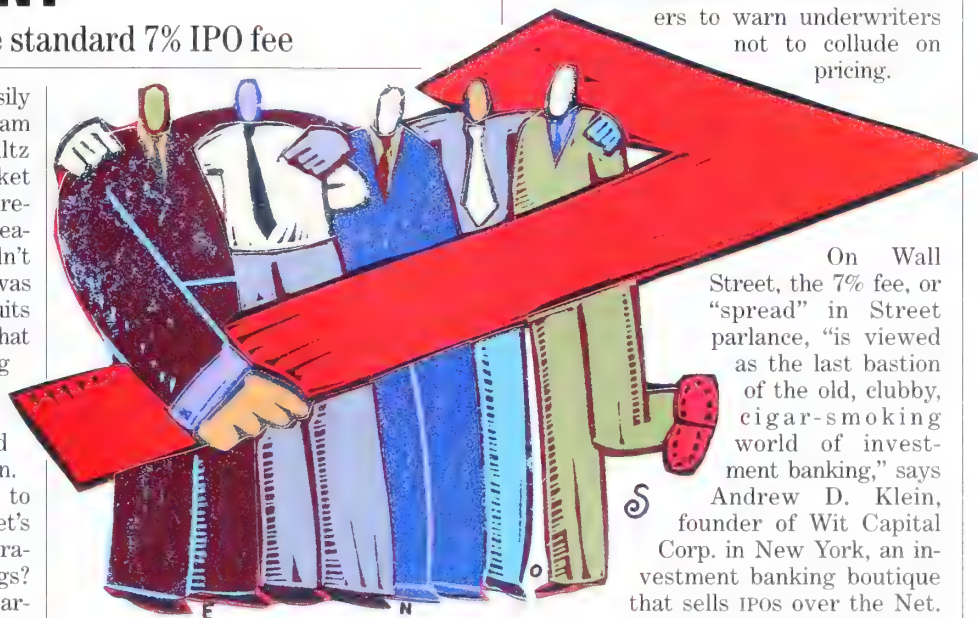
Collusion on Wall Street is not easily spotted. When academics William J. Ritter and Hsuan-Chi Chen figured out that NASDAQ market prices rarely quoted stocks in increments of less than 25¢, their 1994 treatise in the *Journal of Finance* didn't even conclude that anything was amiss. But the paper triggered lawsuits and a two-year federal investigation that uncovered widespread collusion among investors to fix prices on hundreds of NASDAQ stocks. The result: dramatic price drops that lowered spreads and benefited investors more than \$25 billion.

Another academic study led to a major upheaval in one of Wall Street's cherished businesses—the lucrative market in initial public offerings? The upcoming *Journal of Finance* article by two University of Florida academics raises disturbing questions about whether investment banks charge too much for companies public. Their research shows that investment banks almost invariably charged a flat rate of 7% of the offering price in the vast majority of IPOs over the last three years (chart). The fee is twice as high as the 3.5% charged by investment banks

CLUSTERING. Coincidence, or a case of price-fixing? Professors Ritter and Hsuan-Chi Chen don't know, but they wonder why, in the supposedly highly competitive investment-banking market, no one competes on price. "I'm not sure this is a smokescreen, but regulators need to keep their eyes and ears open for evidence of collusion" among big investment firms, Ritter says.

Securities and Exchange Commission panel last reviewed IPO pricing in 1994 and spotted a similar pattern. "Ritter's study raises questions of troubling issues," says SEC Commissioner Steven Wallman. "The clustering of the 7% spread seems very unusual. There are possible explanations, but there are also possible nefarious ones." John H. Gibbon, editor of the *IPO*

But since the 1994 study, pricing has become even more uniform, Ritter says. Between 1992 and 1994, for example, only about half of all IPOs had 7% fees, according to Wallman. But in the last three years investment bankers charged precisely 7% about 75% of the time. The fee clustering recently prompted the National Association of Securities Dealers to warn underwriters not to collude on pricing.



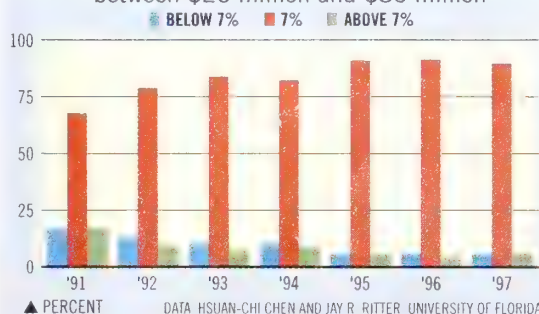
On Wall Street, the 7% fee, or "spread" in Street parlance, "is viewed as the last bastion of the old, clubby, cigar-smoking world of investment banking," says Andrew D. Klein, founder of Wit Capital Corp. in New York, an investment banking boutique that sells IPOs over the Net.

With margins on brokerage and other fees shrinking, IPO fees are crucial sources of profits. "Out of mutual self-interest, most bankers have lived by a not-needed-to-discuss code that they wouldn't cut spreads," Klein says. **HAGGLE-PROOF.** Investment bankers and IPO lawyers say there are numerous reasons why banks maintain the 7% spread. Most important, says John J. Egan III, an IPO attorney at Goodwin Procter & Hoar in Boston, a standard fee makes it easier for investment banks to work together in syndicates, since it eliminates haggling over the division of fees. Few companies going public question the fee because "it's much more important to have a harmonious offering, and for syndicates to work harmoniously you have to have a standard set of fees," Egan says.

Antitrust officials, though, have had little interest in the issue. The reason: No one has come forward to complain that the cost of going public is too high, Wallman says. For companies that want to go public, banker's fees are low on their list of concerns. Much more important is how much money their bankers can raise in an IPO and how strongly they can push it with investors.

PRICE-FIXING?

Gross underwriting spreads on IPO deals between \$20 million and \$80 million



It may not be obvious there's a problem that needs to be fixed. Still, investors bought NASDAQ stocks at unfair prices for decades until a couple of academics pushed regulators into giving the matter a look. The Ritter-Chen study may provide the ammunition for a similar review.

By Geoffrey Smith in Boston, with Paula Dwyer in Washington

INVESTIGATIONS

THE CASE OF THE GYM BAG THAT SQUEALED

An accidental find in New York tips the Feds to a stock scam

It was the kind of oversight that is, usually, pretty harmless. A "Marina Shap" failed to pay the rent on her cubicle at Manhattan Mini-Storage in the SoHo section of New York. When the manager opened the bin last January, however, he found an intriguing assortment of knickknacks: Two 9-millimeter pistols, a 12-gauge shotgun, and, the FBI asserts in a court filing, "various documents in a box and gym bag."

The fluke discovery of the guns was hardly earth-shattering in gun-happy New York. But the documents drew the attention of the FBI's Russian organized crime squad. According to a sealed criminal complaint filed with the U.S. District Court in Brooklyn and obtained by BUSINESS WEEK, the FBI maintains that the mini-storage document trove sets forth a tale of stock manipulation and money laundering. Allegedly involved are more than 30 foreign shell companies and bank accounts that, the complaint maintains, were used to launder the proceeds from illegal stock sales during 1994 and 1995.

MONEY LAUNDERING. The feds are charging that the stock scheme involves two individuals—Gennady "Gene" Klotzman and Felix Sater—who they say ran a now-defunct micro-cap brokerage, White Rock Partners & Co., which later changed its name to State Street Capital Markets. Both are charged with stock manipulation and money laundering. The lawyer listed in the court docket as Klotzman's attorney, Michael W. Kahn, did not respond to a request for



SOHO STASH: The FBI may be investigating links to Russian mobsters

comment. Klotzman was arrested in September and is in custody. Efforts to reach Sater were unsuccessful.

The stock targeted in the complaint was a Bala Cynwyd (Penn.) company called Holly Products Inc. The company makes electronic components for casino equipment, among other things, and was the subject of a public offering by White Rock in late 1994. Its share price was elevated through 1995 but swiftly plummeted, down 96% over the past year to a recent price of 3¢. The feds do not charge any involvement by officials of Holly, whose most recent phone listing is inactive. According to the FBI, Sater and Klotzman manipulated Holly and other shares in a "pump and dump" scheme, and then laundered the proceeds.

According to the complaint, the scheme began when Klotzman and Sater secretly acquired large blocks of stock for offshore corporations they controlled. The FBI maintains that the two men inflated share prices by under-the-table

payoffs to brokers at White Rock and other firms, pegged to sales volume and two men's profits, \$10 million according to the complaint, then went through trans-national money laundry.

According to the feds, the money came in from hapless investors who were on a round-the-world tour—to the Netherlands Antilles and Switzerland and then to Israel, Luxembourg, the Netherlands, Ireland, the Channel Islands, and the U.S. The feds say

Sater and Klotzman sometimes used pseudonyms—and sometimes did not—evidently made the FBI's job easier.

The prosecution of Klotzman and Sater bears strong similarities to the prosecution of New York jeweler Aleksandr Paul, who is not charged in this case (BW—10). Paul was arrested in July and charged with engaging in a money-laundering scheme at White Rock. Paul pleaded not guilty and his lawyer says he is vigorously fighting the charges.

One issue raised by the Klotzman-Sater complaint is the possibility that the FBI may be

investigating ties to Russian organized crime, which has long been believed to be well meshed in the world of shady micro-cap brokers. The FBI agent handling the Klotzman-Sater case, Leo Taddeo, belongs to the FBI's Russian organized crime squad. Sources familiar with the Paul case say the FBI is also probing possible Russian and Italian mob involvement in the Paul investigation. Paul's lawyer, Benjamin Brafman, denies knowledge of any mob probe.

If indeed the feds are pursuing the ties, they need more than lucky breaks like unpaid mini-storage bills. They need confidential informants familiar with the operations of these firms. The complaints in both cases indicate that they've got several. Perhaps one of them, someday, will answer the question: Who owned those two 9-millimeter pistols and that 12-gauge shotgun? And what was he or she going to do with them?

By Gary Weiss in New York



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BY GENE G. MARCIAL

BUILDERS GOING THROUGH THE ROOF

Investment strategist Steven Kroll plays the market with aplomb—and prudence: He buys shares only in fast-growth companies—with yearly earnings rises of 20% to 25%—that are cheap, trading at book value or less. They must also be buyout targets in consolidating industries. And Kroll seeks U.S. plays: no Asian or emerging-market exposure.

Where to find such stocks? Kroll, a managing director at Monness, Crespi, Hardt, a Wall Street research boutique that caters to large institutions, is snapping up specialty homebuilders, where “consolidation is just picking up,” he says. Kroll’s top choices: Standard Pacific (SPF), Del Webb (WBB), and Ryland Group (RYL).

He thinks large-caps—the Cokes and Gillettes—are still overpriced. Kroll was a champion of such blue chips at J. P. Morgan, where he was a portfolio manager for 11 years, before forming Hutton Asset Management in 1981.



KROLL: He looks for torrid growth

Hutton’s assets had ballooned from zero to \$38 billion by the time he left in 1991 to join Monness. Kroll thinks the best values now are to be found in small- to mid-cap stocks.

Standard Pacific, a builder of upmarket houses in California and Texas, trades at

9¢ a share—way below its estimated book value of \$12.40. On Oct. 26, Standard reported that its third-quarter earnings jumped 68%, to \$11 million, or 38¢ a share. Kroll expects Standard to earn \$1.40 a share in 1998 and \$1.80 in 1999, compared with last year’s 81¢. He thinks the stock’s long-term worth is 25.

Del Webb, which develops residential communities in Sunbelt states such as Arizona, Florida, and Nevada, trades at 22—equal to its book value. For the quarter ended Sept. 30, earnings jumped 35%. Analysts expect Del Webb to earn \$2.58 in fiscal 1999 ended

June 30, up from fiscal 1998’s \$1.96. Kroll sees the stock, now at 22, hitting 40 in a year.

Ryland specializes in single-family attached and detached houses and offers mortgage-related services to its customers. Now at 25, Ryland is a double in a year, according to Kroll. Goldman Sachs analyst Stephen Dobi recently upped his 1998 estimate from \$2.10 to \$2.40, and raised his 1999 number from \$2.55 to \$2.95, compared with \$1.33 in 1997.

DOES DATA GENERAL NEED A PARTNER?

Data General (DGN), which skidded to 7 on Aug. 31—down from 17 in early June—is back on the radar screens of investors who play the takeover game. They are betting that Data General, which has risen to 13, is being pursued by the likes of Storage Technology or Sun Microsystems. What is the logic behind this reasoning? They figure Data General is a compelling buy both on fundamentals and as takeover bait.

“DGN is an undervalued player in the attractive enterprise [data] storage market,” says Don Young, a technology analyst at PaineWebber. Data General is too small, he adds, “to stand alone.” It “needs to align, partner, or merge with other industry players.” He figures that Data General has a breakup value of \$23 to \$40 a share.

The company’s Clariion storage division alone is worth \$15 to \$22 a share, estimates Young. And the company’s other major business—the Aviiion server unit—“appears to be in the best strategic shape,” says Young, who figures it is worth \$11 a share.

PaineWebber investment strategist Edward Kerschner picks Data General as one of his takeover bets in technology. He says other possible buyers include Hewlett-Packard and IBM. “With DGN trading at just 20% to 30% of revenues, the stock is attractively valued,” says Kerschner. DGN spokesman Jim Dunlap declined comment.

IT TOOK A SAVAGE BEATING



CRITICAL MASS AT ROCK OF AGES

Rock of Ages (ROAC) is neither church choir nor a rock band. It is a company in which Goldman Sachs Investment Management has taken a stake. Other investors include Wellington Management, with 9%, and Fidelity, with 5%. What’s Rock’s appeal? the leader in the tombstone business.

“Rock of Ages is the kind of special-situation stock we hanker for,” says Mike Connor, co-head of CB Partners New York investment firm. The stock is now at 11, traded as high as 21 a year ago. Rock of Ages is a pure play in the rapidly growing tombstone market.

Lower death rates have been a concern for funeral homes. But Rock “has a virtual lock on its business—from quarrying marble and granite to making and distributing tombstones,” Connor notes. So Rock is gaining market share and raising prices.

Connor and his partner, Jerry Llan, think the price could double in 12 months, based on the 30% annual earnings growth they see for next few years. They think Rock represents a “very strong takeover target.” They note that the stock trades at a price-earnings ratio of just 11, lower than others in the death-industry, such as Service Corp. International, whose p-e is 20.

Rock owns and operates 13 quarries and 13 plants. It sells its products through 2,125 distributors and 42 company-owned retail stores. The company has been acquiring smaller tombstone makers. As the only fully integrated memorial maker, Rock has a “significant advantage” in the industry, says Susan Little, an analyst at Raymond, James & Associates. She figures Rock will earn 95¢ a share this year versus \$1.24 in 1999, vs. last year’s 57¢.

TOPPLED TOMBSTONES



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GM: MODULAR PLANTS WON'T BE A SNAP

What works for rivals in Brazil may not for the U.S. giant

Auto executives have a dream. They envision a super-efficient factory where premade chunks of a car roll in to be bolted together into a finished vehicle by a handful of assembly-line workers, the way a child snaps together Lego blocks. The result: spectacular savings on capital investment, payroll, and per-vehicle costs.

The dream, or at least some attempt to reach it, is slowly nearing reality. So far, low-volume versions have appeared, mainly in emerging markets like Brazil, where Volkswagen, Chrysler, Ford, and GM are jumping in, or for niche products like Mercedes-Benz's tiny SMART car in

France. General Motors Corp.'s first modular plant, the cutting-edge Blue Macaw factory in Brazil, will open next spring. But GM, in a plan called Project Yellowstone, also intends to roll out several more such plants over the next few years to replace inefficient plants in the U.S. Rust Belt.

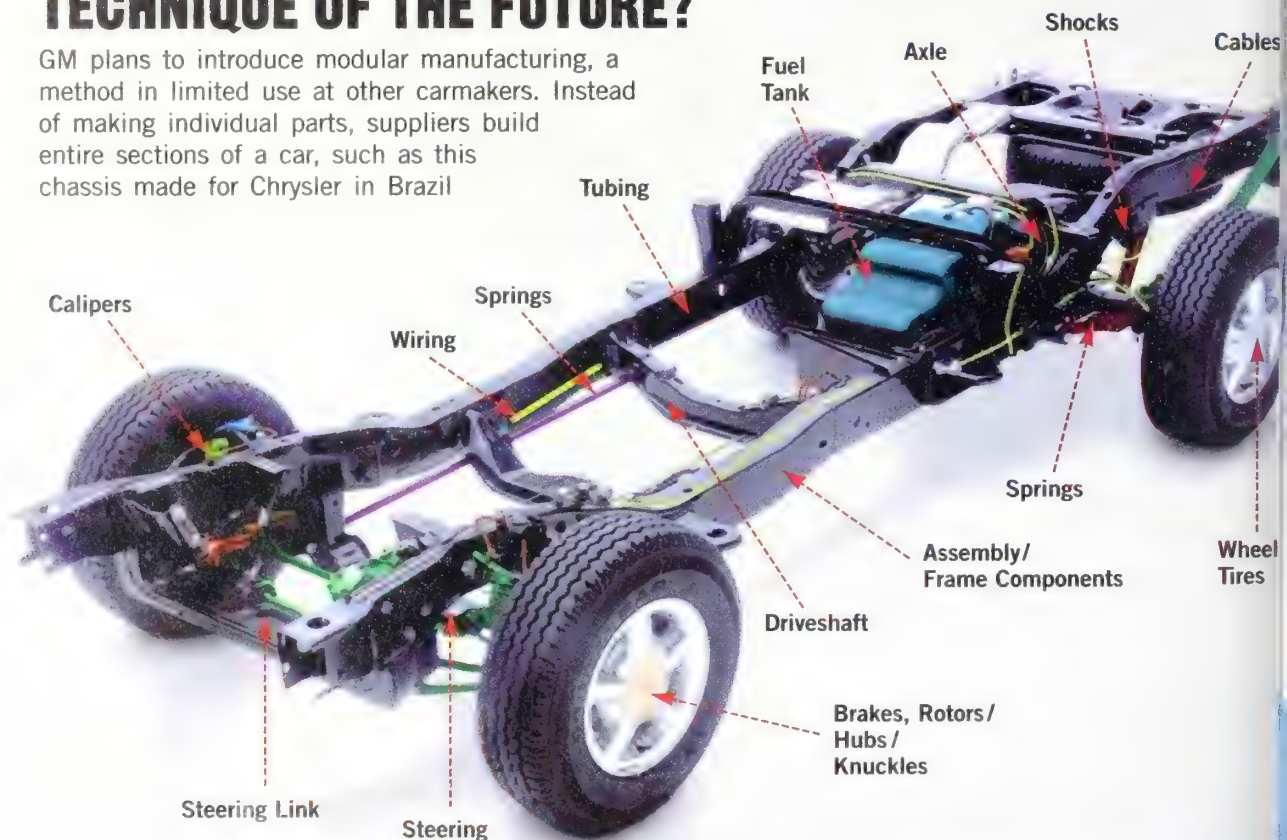
GM's effort will be the most ambitious test of the futuristic factory. No other carmaker plans to go modular in so many plants. Ford Motor Co. and Chrysler Corp. won't risk a falling-out with their workforces in the U.S., where the United Auto Workers (UAW) is sure to oppose shifting thousands of

jobs to lower-wage, often nonunion suppliers. Critics warn that the whole idea of modular assembly is overblown and unlikely to achieve big savings. But GM can pull it off, carmakers around the globe will likely rush to follow suit. Suppliers can "come up with better solutions [than GM's] and take costs out of smart designs," says GM President Richard Wagoner Jr., who adds that he will decide in early 1999 which vehicle Project Yellowstone will make first. One likely candidate, say analysts, is the Chevrolet Cavalier, now built at aging plants in Lordstown, Ohio, and Lansing, Mich.

Modular assembly is, at heart, an extension of outsourcing, the common practice of buying parts from outside suppliers. For years, auto makers have been shifting away from producing more of a car's 5,000 components by contracting parts, or even groups of them, to outside suppliers. The module approach goes further, handing off engineering and production responsibility for entire chunks of the car, such as the chassis or interior. Suppliers design a module, make some of its hundreds of parts and subassemblies, contracting others. They set up plants next to—or even inside—the auto manufacturer's

TECHNIQUE OF THE FUTURE?

GM plans to introduce modular manufacturing, a method in limited use at other carmakers. Instead of making individual parts, suppliers build entire sections of a car, such as this chassis made for Chrysler in Brazil



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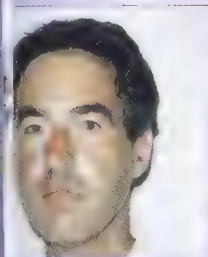
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The McGraw-Hill Companies

er's and deliver modules right to the assembly line, where carmaker employees bolt them together.

The idea looks great on paper. Suppliers shoulder more risk and investment, allowing auto makers to cut the size of an assembly plant by two-thirds. A carmaker can slash its workforce and capital investment in new plants—often \$1 billion a pop—by half. It also can slice its engineering and testing budget. Auto makers say such cost-sharing is essential. "It is impossible for any auto company to have all the resources in-house to do all of the R&D and technology investment needed today," says Chrysler Chairman Robert J. Eaton.

DESPERATE. Advocates say the result can be more efficient designs with fewer parts. "It's easier to handle complexity if you break [cars] into modules and enlist your suppliers," says Daimler Benz marketing chief Dieter Zetsche. Adds Mike Laisure, vice-president for modules at auto parts maker Dana Corp.: "We can get the job done quicker."

For GM, modular's appeal is particularly strong; the auto giant desperately needs the promised savings for its small cars, on which analysts estimate GM loses at least \$1,000 each. GM's Wagoner says small cars and compact pickups are likely modular candidates.

But the pitfalls are many. For one, the idea won't please GM's union workers, with whom relations still are frayed after crippling strikes. While GM says it will shrink staff by attrition, the UAW won't like outsourcing thousands of jobs.

GM is pressing ahead anyway. Small-car chief Mark Hogan, who launched the Blue Macaw project and is spearheading Yellowstone, says he discussed GM's plans with Richard Shoemaker, head of the UAW's GM unit, on Oct. 14. "We're going to have to find some middle ground," was all Hogan would say

afterward. The UAW declined comment. UAW officials may seize on a possible silver lining, though: the chance to recruit lower-wage supplier workers, who will work side-by-side with higher-paid union ones. "That's a perfect opportunity" for UAW recruiters, says Wayne State University labor historian Steve Babson.

Chrysler and Ford, whose plants already are efficient, don't feel the ur-

bly requires auto makers to work closely with key suppliers. But General Motors still hasn't mended all the rifts created in the early 1990s by heavy-handed cost-cutting tactics then-purchasing czar José Ignacio Ló de Arriortúa. GM's Hogan says its supplier relations are improving but cedes they still aren't perfect.

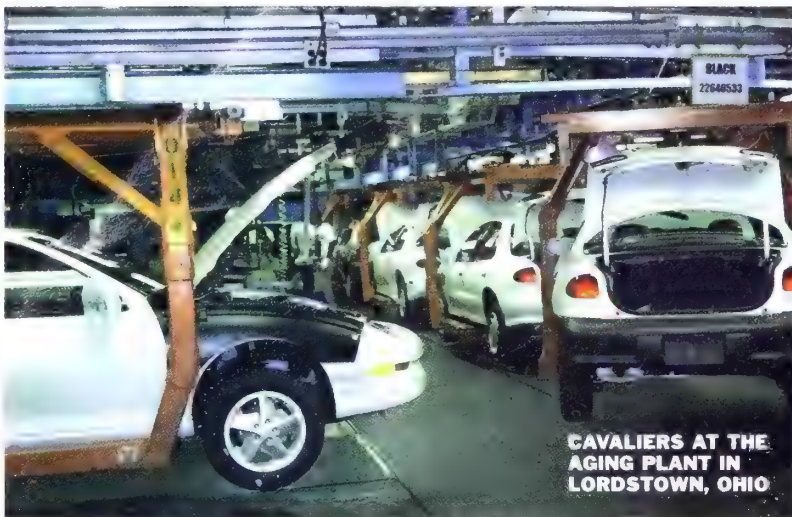
Naysayers of modular note Daimler's rocky experiment with the SMART min-

Earlier this year, German auto maker Daimler-Benz launched its micro-car as a joint venture with SMH, the Swiss maker of Swatch watches, in a plant in eastern France. Quality problems were rife, delaying the introduction by months. "We had to learn that what makes sense in theory causes headaches in real life," says Daimler's Zetsche. Although he says modular assembly now works well for the \$9,900 SMART car, Daimler doesn't want to entrust suppliers with big pieces of its more complex Mercedes luxury sedans.

EXTRA VALUE. Some critics see the modular concept as little more than a shell game. "It does is shift labor from one facility to another, without reducing the labor involved," says ING Baring's Mam Selz, auto analyst. Maryann Keller, only real gain comes if suppliers can bolt parts better than carmakers. If they'll try to recoup by raising prices, Japanese auto makers are likely in part for this reason. With modules, "Toyota's labor cost is just transferred to suppliers, which has no meaning for cutting costs," says Toyota spokesman Koki Konishi.

GM is betting that the modular approach can wring big efficiencies out of its U.S. factories. But rocky relations with suppliers and blue-collar workers make the difficult job of turning an untested dream into reality even tougher.

By Kathleen Kerwin in Detroit, bureau reports



CAVALIERS AT THE AGING PLANT IN LORDSTOWN, OHIO

BUILDING THE MODULAR CAR

Here's how auto executives hope to boost efficiency:

SUPPLIERS

Help design whole sections of a new vehicle, such as the chassis and interior, striving for simplicity and greater efficiency; suppliers also do engineering, assembly, and testing of modules.

SUB-SUPPLIERS

Provide hundreds of individual parts and are accountable to the suppliers.

EMPLOYEES

The suppliers' workers are stationed near or even in the carmaker's assembly plant. Carmaker employees work mainly on bolting together the finished chunks to complete the car.

COSTS

The auto maker cuts its R&D budget and engineering staff, has a shorter assembly line, and can employ half the number of workers. It can halve the \$1 billion typical cost of building a new plant.

agency to follow GM. They already have modular operations or plans in Brazil: Chrysler opened a \$315 million modular truck plant there this summer, and Ford's Project Amazon aims to build a Brazilian car plant by 2001. But neither plans a modular U.S. plant. "You can't lay people off and pay somebody else to do" the work, says Chrysler's Eaton.

Supplier relations could be another stumbling block for GM. Modular assem-

IMAGINE

DRIVING HOME FROM THE OFFICE AT 7:55. YOU'RE TIRED — BUT IT'S THE KIND OF SATISFIED TIRED THAT COMES FROM HAVING A GREAT,

productive day at work. As the telecommunications manager for your company, you've just engineered the biggest improvement to your communications system ever. Now every desktop will have simultaneous access to both voice and data capabilities. Users will be able to manage multiple calls with a single line and a single telephone number, and will have access to advanced services like Caller ID and Conference Calling. Furthermore, managers will have desktop videoconferencing capabilities on the same line they use for voice and data.

Arriving home, you notice that the evening activities are in full swing. Your husband is listening to audio clips on the Internet, while your daughter is talking to two friends on a three-way call. Halfway through her call she receives an e-mail. After dinner, you decide to dial up the corporate Local Area Network and send e-mail to your department head detailing the advantages of your company's digital Centrex telecommunications capabilities. While your husband is scanning the news Web sites to get caught up on the day's events, you upload a list of tomorrow's planned activities.

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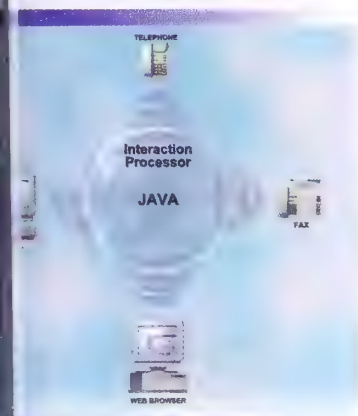
SDN:

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communications capabilities suggested by this scenario are indicated, but also quite attainable.

Welcome to the world of Integrated Services Digital Network (ISDN). It's a switched, end-to-end network that allows for simultaneous transmission of voice, data, and video information. With two full-rate digital channels, Basic Rate Interface (BRI) ISDN provides speeds up to 128 Kilobits per second (Kbps). This is the version most homes and small businesses use. Primary Rate Interface (PRI) bundles 23 channels together, providing speeds of up to 1,544 Kbps.

This is the version most larger businesses use to network their geographically dispersed sites.



ISDN remains the only high-speed network that is available throughout the world today. While new communications technologies such as Cable Modems, DSL Modems, and ADSL (Asynchronous Digital Subscriber Line) promise to emerge as alternative access methods into the network, ISDN deployment continues to grow phenomenally, with good reason. ISDN is a 'high speed' service that is available now, everywhere, to support new and emerging applications for data, voice, and video collaboration.

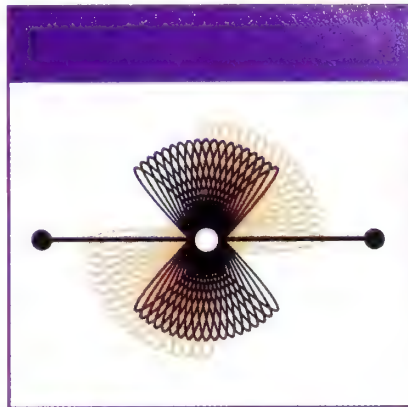
ISDN APPLICATIONS INCLUDE:

Internet Access — ISDN flexible high speed access to this popular application.

- **Remote Local Area Network (LAN) Access** — The distributed computing network employed by so many corporations can be accessed remotely via ISDN.
- **Work At Home** — ISDN's ability to carry multiple calls simultaneously means that a single ISDN line can serve a home office (typically, voice, data, and fax).
- **Centrex and Key Telephone Capabilities** — ISDN supports a full range of advanced voice services for small and large businesses.
- **Videoconferencing and Imaging** — ISDN supports a host of image data transfer capabilities that serve industries as diverse as banking and telemedicine.
- **Telemetry** — ISDN's separate signaling channel (the D channel) is commonly used for utility meter reading and alarm monitoring.
- **Transaction Services** — ISDN enables high-speed credit verification for point-of-sale applications.
- **PBX Trunking** — ISDN PRI allows PBXs the ability to manage multiple call types such as DID, WATS, 800, and foreign exchanges.

Internet Service Providers are better served by ISDN PRI. The fast call set up and tear down of the digital ISDN PRI increases the effective amount of traffic that can be handled by ISPs. Unlike T1 technology that can only handle analog modems, PRI has the ability to terminate analog and ISDN BRI generated calls.

There's a new exciting ISDN innovation — it's called Always On/Dynamic ISDN (AO/DI). Using AO/DI (see sidebar), a user can keep the connection with their office or Internet Service Provider (ISP) up as long as they keep their computer turned on. They can continually receive and send e-mail and small files, make and receive fax and voice calls — all simultaneously, without the frustration of dialing and logging in many times throughout the day.



INTERACTIVE INTELLIGENCE

HOW AO/DI WORKS:

Normally, AO/DI utilizes the ISDN D-Channel to maintain an X.25 connection to the ISP — this provides the low bandwidth connection for e-mail notification, "push" data, etc. However, when additional bandwidth is needed (for example, to handle a graphics-intensive download from the Internet), AO/DI automatically adds circuit-switched B-channels at 64 Kbps each. With both B-channels in use, 128 Kbps are available. After bandwidth needs decrease, the B-channels are released. The X.25 call remains connected throughout the entire login session. If a voice call comes in during a download, the user may choose to take it, reducing the bandwidth to 64 Kbps temporarily. (Important Note: The user need not understand any of this to make it work.)

ISDN:**THE PROMISE IS NOW****SOME KEY POINTS TO REMEMBER ABOUT ISDN:**

- It provides guaranteed bandwidth — ISDN offers dedicated bandwidth to the user; it's not shared with anyone else, offering security and consistency.
- It uses the existing phone line — in most cases, the existing analog telephone line can easily be converted for ISDN service.
- It simultaneously supports feature rich voice, data, and video calls.

PROJECTIONS INDICATE A BULL MARKET FOR ISDN

According to the National ISDN Council, there are currently more than one million BRI ISDN lines and 80,000 PRI ISDN lines in use in the United States. The Council indicates that ISDN BRI is growing in excess of 40% a year, while the PRI base is growing at more than 130% a year. And within two to three years, 25% of the Centrex lines in the country will be ISDN.

Dataquest, a respected market researcher, reports a similar trend: BRI lines will grow to nearly four million deployed in the U.S. by the end of 2001.

Initiatives to make ISDN more consumer-friendly are playing a significant role in the growth of ISDN. Working with the National ISDN Council, the Vendors' ISDN Association (VIA) has sponsored programs to:

- Simplify and automate the ISDN ordering process.
- Establish ISDN ordering codes, which provide consumers with "packages" of most-requested ISDN features.
- Introduce new features to ISDN like AO/DI.

WHY ISDN? WHY NOW?

Video conferencing, fax, file transfer, increased line capacity, improved service, new opportunities.

BECAUSE YOU WANT TO STREAMLINE OPERATIONS

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BECAUSE YOU WANT TO CUT COSTS AND BOOST PRODUCTIVITY

With ISDN, one phone number and one phone line can do it all: carrying images from your fax, conversations from your phone, and data from your computer — all simultaneously. The productivity benefits are significant... and the cost savings can be substantial.

BECAUSE YOU NEED NEW COMPETITIVE TOOLS

Whether you're looking for greater control over voice communications or fast, virtually error-free transmission of data, ISDN delivers the speed, reliability, and functionality you need.

Bell Atlantic

With ISDN, you can have it all: video conferencing, fax, file transfer, increased line capacity, improved service, new opportunities.

THE VOICE OF THE SUPPLIERS: THE VENDORS' ISDN ASSOCIATION

The Vendors' ISDN Association (VIA) is a non-profit corporation composed of equipment suppliers: 3Com, ADC Kentrox, ADTRAN, Inc., Arescom, Inc., Ascend Communications, Inc., AT&T, Bay Networks, Inc., BinTec Communications, Cisco Systems, Digintec, Inc., ECI Telecom, Eicon Technology, Hermstedt GmbH, Intel Corporation, ITK Telecommunications, Microcom, Microscan Corporation, Motorola, NetAccess, Inc., OmniLink Communications, Shiva Corporation, Telenetwork, Toshiba America Information, Turnkey Solutions, and Virtual Access. VIA's primary function is to simplify and accelerate the availability of interoperable ISDN customer equipment solutions based on the needs of end-users worldwide.

NEW INTERNET APPLICATIONS

... revolutionize the way people work and live. Nortel Networks is leading these efforts and evolving its ISDN products and services to deliver unparalleled value and solutions in the marketplace. Through its ISDN BRI and PRI solutions, Nortel Networks delivers revenue-generating services to its customers that provide increasingly sophisticated communications with seamless, high-speed access and multimedia capabilities.

With ISDN as a critical component, Nortel Networks' own telecommuting solution, the global company is an aggressive and rapidly growing telecommuting program with more than 3,600 employees participating worldwide. "Nortel enjoys a tremendous competitive advantage in the area of telecommuting," said Richard Reid, VP, DMS North America, Nortel Networks.



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THE PROMISE IS NOW

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Nortel Networks continues to develop and deploy advanced voice and high-speed data access technologies to its customers. PacificNet, a

local Internet Service Provider in the Los Angeles area (www.pacificnet.net), uses ISDN PRI for its Internet dial-up connections. ISDN PRI enables more efficient use of PacificNets' PM3 dial-up hubs and drives cost savings on equipment and maintenance. PRI's flexibility to handle both digital and analog calls has helped make PacificNet one of the fastest growing and most reliable ISPs in the Los Angeles area.

Nortel Networks works with customers worldwide to design, build, and deliver telecommunications and IP-optimized networks. Customers include public and private enterprises and institutions; Internet service providers; local, long-distance, cellular and PCS communications companies, cable television carriers, and utilities. Nortel had 1997 revenues of US\$15.5 billion and Bay Networks, a wholly-owned subsidiary of Nortel Networks, had revenues of US\$2.4 billion during its most recent fiscal year.

THE NATIONAL ISDN COUNCIL: THE ENGINE BEHIND ISDN

The National ISDN Council (NIC) is an association of companies that fund Bellcore, a leading provider of communications software, engineering, consulting and training services based on world-class research, to provide technical, operational, and marketing support. Members include Ameritech, Bell Atlantic, BellSouth, Cincinnati Bell Telephone, Lucent Technologies, Nortel Networks, and SBC (which includes Pacific Bell and Southwestern Bell).

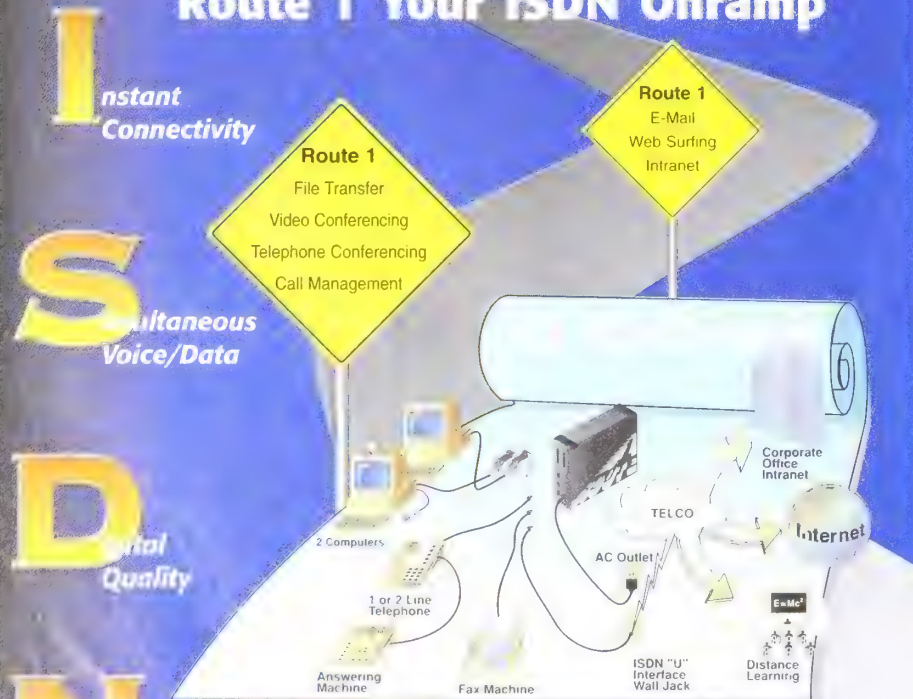
The NIC resolves technical and policy problems related to National ISDN and determines the needs of industry players (including service providers, equipment suppliers, and end-users) to utilize National ISDN effectively. The NIC also creates and fosters ISDN awareness among the mass market and business users while helping to set industry expectations on the course of National ISDN.

The NIC develops requirements for new National ISDN features and ensures their timely deployment through the National ISDN Enhancements process. The NIC also oversees the development of Bellcore's Customer Premises Equipment (CPE) Guidelines. In addition, the NIC is an originator of key player in National ISDN industry initiatives designed to simplify the ordering process and improve the customer experience.

Interactive Intelligence offers a Windows NT-based communications system, Enterprise Interactive Center (EIC), for call centers and enterprises. EIC replaces legacy telecom devices including PBXs, ACDs, IVRs, voice mail systems, servers, and CTI gateways.

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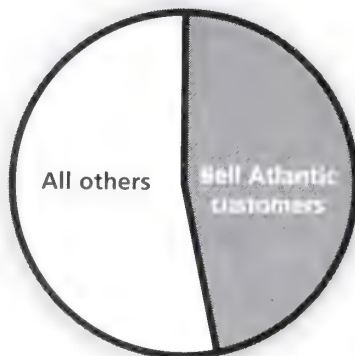
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ISDN is available in most Bell Atlantic service areas and where facilities permit. Monthly ISDN and usage fees apply. You will need some equipment Bell Atlantic does not supply.

For More Information Circle Free Product Info No. 84

Common applications are automated distribution, interactive voice response, and unified messaging. The approach is IT-concentric, with a much lower cost of ownership and takes great advantage of ISDN PRI service," says Dr. Donald N., CEO of Interactive Intelligence. "We are seeing widespread adoption of ISDN PRI around the world for high-quality voice connections in call centers and other businesses."

ISDN CENTREX: IT HELPS YOU GET DOWN TO BUSINESS

Want to have access to sophisticated voice and data business services without having to support a lot of on-premise equipment? Consider ISDN Centrex. Like its analog counterpart, Centrex provides a host of business capabilities such as Hold, Transfer, and Additional Offering from the Telco's central office. However, with its basis in the ISDN network, ISDN Centrex also supports Electronic Key Telephone capabilities. This allows the user to have multiple simultaneous calls to multiple telephone numbers. It permits users to share telephone numbers, while still having individual key access.

INTERESTED?

It should be clear that anyone who needs to send and receive voice, data, and/or video is a candidate for ISDN. To find out more about ISDN, check out the Web sites of the National ISDN Council, (www.bell-atlantic.com/nic) or the Vendors' ISDN Association (www.via-isdn.org).

If you're ready to order ISDN for your office or business, contact your local telephone company (service provider). ISDN provides the capability you need for applications you want, TODAY.

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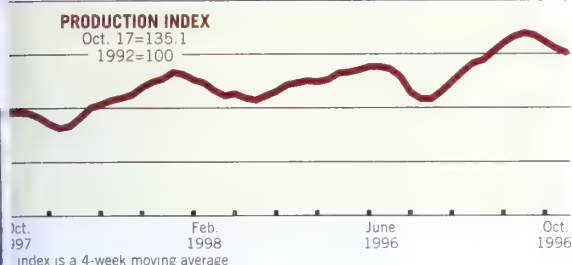
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Business Week Index

PRODUCTION INDEX

Change from last week: -0.3%
Change from last year: 4.3%



Production index fell for the fourth consecutive week. Before calculation of four-week moving average, the index was also down to 134.6, from 135.1 in the previous week. After seasonal adjustment, output of autos edged 3.2%, electric power fell 0.6%, coal and lumber were both down and rail-freight traffic and crude-oil refining dipped 0.7%. Only steel and production showed any upward movement.

Production index copyright 1998 by The McGraw-Hill Companies.

PRICING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STOCK PRICES (10/23) S&P 500	1070.67	1056.42	13.7
GOVERNMENT BOND YIELD, Aaa (10/23)	6.52%	6.40%	-6.6
MONEY SUPPLY, M2 (10/12) billions	\$4,315.8	\$4,315.2r	8.3
UNEMPLOYMENT CLAIMS, UNEMPLOYMENT (10/16) thous.	318	316r	1.3
MORTGAGE APPLICATIONS, PURCHASE (10/23)	299.6	296.9	46.6
MORTGAGE APPLICATIONS, REFINANCE (10/23)	2,774.3	2,507.0	306.1

Sources: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Bankers Assn. (Index: March 16, 1990=100)

INTEREST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
MUTUAL FUNDS (10/27)	5.00%	4.80%	5.49%
COMMERCIAL PAPER (10/27) 3-month	4.96	5.01	5.58
CERTIFICATES OF DEPOSIT (10/28) 3-month	5.16	5.13	5.67
MORTGAGE (10/23) 30-year	6.99	7.02	7.51
FIXED RATE MORTGAGE (10/23) one-year	5.68	5.56	5.70
ADJUSTED RATE MORTGAGE (10/28)	8.00	8.00	8.50

Sources: Federal Reserve, HSH Associates, Bloomberg Financial Markets

Data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

NATIONAL INCOME

Nov. 2, 8:30 a.m. EST ▶ Personal income probably increased 0.2% in September while consumer spending rose 0.4%, says the median forecast of economists surveyed by Standard & Poor's Unit of The McGraw-Hill Companies. Last month, income advanced 0.5%, and consumer spending surged 0.6%.

SURVEY

Nov. 2, 10 a.m. EST ▶ The National Association of Purchasing Management's index probably stood at 49% in October, down from 49.4% in September. A reading below 50% suggests that the manufacturing sector is shrinking.

CONSTRUCTION SPENDING

Monday, Nov. 2, 10 a.m. EST ▶ Building outlays probably edged up 0.2% in September, after rising just 0.1% in August.

FACTORY INVENTORIES

Wednesday, Nov. 4, 10 a.m. EST ▶ Manufacturers probably increased their inventories by 0.2% in September, the same small gain posted in August.

BEIGE BOOK

Wednesday, Nov. 4, 2 p.m. EST ▶ The Federal Reserve's roundup of economic regional activity will be released in advance of the next policy meeting on Nov. 17. Fed watchers will be very interested in any

anecdotes showing that businesses are having a tough time getting financing during the current credit and liquidity crunch.

EMPLOYMENT

Friday, Nov. 6, 8:30 a.m. EST ▶ The S&P MMS median forecast calls for nonfarm payrolls to show a healthy increase of 178,000 in October, after a small gain of 69,000 in September. The October unemployment rate likely remained at 4.6%.

INSTALLMENT CREDIT

Friday, Nov. 6, 3 p.m. EST ▶ Consumers probably added about \$4.4 billion in new credit in September, on top of \$4.6 billion added in August.

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (10/24) thous. of net tons	1,986	2,011#	-6.8
AUTOS (10/24) units	132,648	124,686r#	4.2
TRUCKS (10/24) units	140,600	148,060r#	-2.2
ELECTRIC POWER (10/24) millions of kilowatt-hrs.	60,858	61,583#	1.6
CRUDE-OIL REFINING (10/24) thous. of bbl./day	13,712	13,454#	-6.5
COAL (10/17) thous. of net tons	21,485#	21,395	2.6
LUMBER (10/17) millions of ft.	497.5#	500.3	11.4
RAIL FREIGHT (10/17) billions of ton-miles	28.2#	28.2	4.4

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPAl, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (10/28) \$/troy oz.	293.150	295.250	-6.5
STEEL SCRAP (10/27) #1 heavy, \$/ton	85.50	85.50	-38.7
COPPER (10/23) ¢/lb.	76.7	76.5	-20.8
ALUMINUM (10/23) ¢/lb.	63.5	64.3	-16.8
COTTON (10/23) strict low middling 1-1/16 in., ¢/lb.	66.09	67.58	-5.0
OIL (10/27) \$/bbl.	13.89	13.18	-31.9
CRB FOODSTUFFS (10/27) 1967=100	221.89	223.60	-13.7
CRB RAW INDUSTRIALS (10/27) 1967=100	273.98	275.20	-17.4

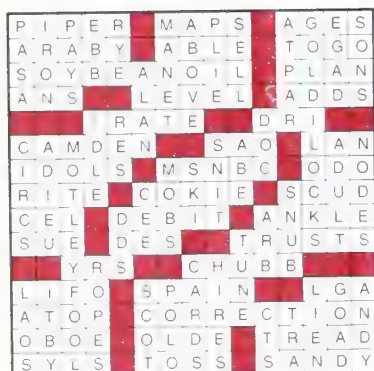
Sources: London Wednesday final settling, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (10/28)	117.53	116.95	120.84
GERMAN MARK (10/28)	1.65	1.64	1.73
BRITISH POUND (10/28)	1.68	1.70	1.67
FRENCH FRANC (10/28)	5.55	5.51	5.81
ITALIAN LIRA (10/28)	1636.6	1626.0	1701.5
CANADIAN DOLLAR (10/28)	1.54	1.55	1.40
MEXICAN PESO (10/28)	10.145	10.035	8.170
TRADE-WEIGHTED DOLLAR INDEX (10/28)	106.4	106.0	105.3

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

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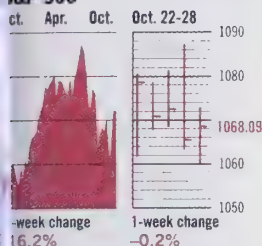
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Investment Figures of the Week

STOCKS

S&P 500



COMMENTARY

unsettling week in the U.S. financial markets, which gave back some of the gains realized in the previous week. The Dow Jones industrial average ended at 8533 on Oct. 22, then slid 81 points the following day. It was the first decline in eight days, as profit-taking took hold. The market continued to fall on Oct. 26 and Oct. 27, with retailers leading the declines. Still, high-tech stocks rallied. The dollar climbed against the yen, and bonds were helped by word of weaker-than-expected home sales.

U.S. MARKETS

	Latest	% change Week	% change Year
Dow Jones Industrials	8372.0	-1.7	11.5
NASDAQ Combined Composite	1737.4	3.7	8.4
S&P MidCap 400	324.0	2.3	1.9
S&P SmallCap 600	155.5	2.4	-13.5
S&P SuperComposite 1500	225.1	0.1	13.5

SECTORS

	Latest	% change Week	% change Year
Bloomberg Information Age	369.5	2.2	31.0
S&P Financials	114.4	-2.0	3.2
S&P Utilities	249.4	-0.6	21.1
PSE Technology	345.8	4.4	13.8

FOREIGN MARKETS

	Latest	% change Week	% change Year
London (FT-SE 100)	5293.9	1.7	8.7
Frankfurt (DAX)	4536.3	0.3	19.6
Tokyo (NIKKEI 225)	13,516.1	-4.9	-19.8
Hong Kong (Hang Seng)	9927.1	2.7	-7.8
Toronto (TSE 300)	6033.8	3.2	-11.9
Mexico City (IPC)	3843.7	-0.2	-19.8

FUNDAMENTALS

	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.48%	1.49%	1.65%
S&P 500 P/E Ratio (Last 12 mos.)	26.6	26.7	23.0
S&P 500 P/E Ratio (Next 12 mos.)*	21.1	20.7	18.3
First Call Earnings Surprise*	0.94%	1.36%	2.42%

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 200-day average	1072.6	1069.6	Negative
Stocks above 200-day average	24.0%	23.0%	Positive
Options: Put/call ratio	0.55	0.54	Negative
Insiders: Vickers Sell/buy ratio	0.41	0.46	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Machine Tools	21.4	Genl. Merchandise Chains 64.3
Toys	20.1	Drug Chains 55.0
Cosmetics	19.6	Communications Equip. 48.7
Soft Drinks	16.1	Long-Dist. Telecomms. 48.3
Household Products	15.7	Drugs 44.8

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Personal Loans	-14.8	Oil & Gas Drilling -55.6
Pollution Control	-11.0	Metals -41.0
Domestic Oil	-9.3	Leisure Time -39.7
Chemicals	-8.8	Oil-Well Equip. & Svcs. -36.1
Life Insurance	-8.7	Oil Exploration & Prod. -29.7

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

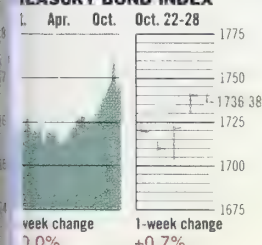
	Price	1-month change
Wells Fargo	361	-2
Yahoo!	123 3/4	-4 3/16
Citicorp	79 13/16	-20 15/16
Eli Lilly	76 7/8	-3
Amgen	77 3/8	-2
Microsoft	105 7/16	-5 7/8

Decline ahead? Stocks with most significant selling on price strength

	Price	1-month change
MCI WorldCom	52 9/16	2 11/16
Tellabs	53 3/8	7 1/16
Washington Mutual	36 7/16	1/2
eBay	82 1/2	34 1/4
Becton Dickinson	40 15/16	5/16
Northern Trust	72 3/16	1/8

INTEREST RATES

TREASURY BOND INDEX



Bloomberg Financial Markets

KEY RATES

	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	4.89	4.93	5.14
90-DAY TREASURY BILLS	4.25	4.00	5.19
6-MONTH BANK CDS	4.47	4.57	5.10
1-YEAR TREASURY BILLS	4.06	4.02	5.35
10-YEAR TREASURY NOTES	4.56	4.59	5.91
30-YEAR TREASURY BONDS	5.12	5.08	6.23
LONG-TERM AA INDUSTRIALS	6.28	6.28	6.75
LONG-TERM BBB INDUSTRIALS	7.21	7.05	7.12
LONG-TERM AA TELEPHONES	6.63	6.67	7.01

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	10-yr. bond Last week	30-yr. bond Latest week	30-yr. bond Last week
GENERAL OBLIGATIONS	4.09%	4.04%	4.79%	4.73%
PERCENT OF TREASURIES	89.75	88.43	93.55	93.29
TAXABLE EQUIVALENT	5.93	5.86	6.94	6.86
INSURED REVENUE BONDS	4.20	4.18	5.02	4.96
PERCENT OF TREASURIES	92.16	91.50	98.04	97.82
TAXABLE EQUIVALENT	6.09	6.06	7.28	7.19

MUTUAL FUNDS



Morningstar, Inc.

EQUITY FUNDS

Leaders	Laggards
Four-week total return %	Four-week total return %
Newport Tiger T 28.2	Reserve Informed Investors -11.8
Wright EquiFd.-Hong Kong 27.2	GAM Global D -10.6
Newport Tiger Cub A 23.3	PBHG Select Equity -9.1
Guinness Flight China 23.1	OVB Emerging Growth A -8.9
Newport Greater China A 22.6	Bridgeway Aggressive Gr. -8.6
Leaders	Laggards
52-week total return %	52-week total return %
Smith Barney Telecomm. Inc. 49.5	Lexington Troika Russia -87.0
Flag Inv. Communications A 45.6	Vontobel Eastern Europ. Eq. -55.4
Berger Balanced 45.1	Frontier Equity -54.2
Transamerica Aggr. Gr. Inv. 43.7	Dreyfus Aggressive Grth. -54.0
Janus Twenty 40.7	Eaton Vance Wwde. Dv. Res. B -53.1

EQUITY FUND CATEGORIES

Leaders	Laggards
Four-week total return %	Four-week total return %
Pacific/Asia ex-Japan 13.2	Real Estate -3.3
Diversified Pacific/Asia 7.4	Precious Metals -2.7
Japan 5.5	Health -1.8
Diversified Emerging Mkts. 4.1	Mid-cap Growth -0.7
Foreign 3.9	Natural Resources -0.4
Leaders	Laggards
52-week total return %	52-week total return %
Utilities 22.0	Diversified Emerging Mkts. -35.6
Communications 21.0	Latin America -35.2
Large-cap Growth 18.6	Pacific/Asia ex-Japan -26.8
Large-cap Blend 15.2	Natural Resources -26.0
Europe 9.2	Diversified Pacific/Asia -23.4

are as of market close Wednesday, Oct. 28, 1998, unless otherwise indicated. Industry include S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Oct. 27. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

TIME TO THINK ABOUT A TAX CUT

Call it a Keynesian-style tax cut of the kind that John Kennedy passed in the '60s or a Reaganesque supply-side cut of the '80s, but the time has come to start thinking about a significant tax cut for the '90s. Not one that rewards loyal political constituencies under the guise of family values, but a tax cut that promotes economic growth. When Congress returns after elections, it should begin a serious debate over dropping income tax rates. While the current focus on restoring confidence and liquidity to panicky financial markets is the right one, the next big problem facing the U.S. will be bolstering demand in the real economy. The risks are increasingly on the downside. Growth is slowing, perhaps more than most people anticipate. There is even a whisper of recession in the air.

The case for lower taxes begins with a profits recession. Thanks to deflationary pressures around the world, companies don't have much pricing power. Profit margins peaked more than a year ago. After a long period of double-digit increases, corporate earnings per share are now flat and will probably be down for the third quarter compared with a year ago. They will be weak for all of 1999. To rebuild those profits, companies will soon be cutting back on capital spending and hiring. That will hurt U.S. economic growth at a time when Asia remains mired in recession, Latin America hovers near one, and Europe shows signs of slowing down.

The U.S. economic expansion has been investment-led from the beginning. While capital spending is still at high levels, there already are signs that it has begun to flag. Banks and other financial institutions are curbing investment plans for next year. Manufacturers, deeply hit by the Asian crisis, are cutting back even further. Surveys of business confidence show a precipitous drop to the lowest levels since the last recession, boding ill for the months ahead.

Hiring appears to have hit a wall, as well. At a time when

corporate layoffs are proliferating, as chief executives to cut costs, job growth is at its weakest in three years. The number of people receiving unemployment benefits is starting to rise. Home sales appear to have plateaued, even though mortgage rates are unusually low. Consumers still are spending, but confidence is down. The wealthy already have begun to cut back in the aftershock of stock-market losses. The rest of the country will probably follow.

Giving America a big tax break will boost demand as the economy decelerates from its 3% growth rate of the past few years, down to 1% to 1½%—or lower—in 1999. But many fiscal conservatives oppose any tax cuts that would erode the new-found federal budget surplus. What they don't realize is that any surplus is based on continued economic growth. If, as already ready, the projected surplus for 1999 is looking optimistic, the cause tax revenues have begun to fall short of projections. If, as Congress is proving to be untrustworthy with the new-found money, it is frittering it away on spending for special interests, ranging from the raisin lobby to highway construction (the highway bill is the biggest in history).

The trick, of course, is to do what Kennedy and Reagan did—cut the basic rates in the tax tables so that more money stays in the pockets of all taxpayers, raising the incentive to work, spend, and invest. Ending "marriage penalties" and increasing child tax credits don't do this efficiently. What is needed is a return to the spirit of the 1986 tax reform: no loopholes, a couple of basic tax brackets, and a top rate below the current 39.6%. Lower, simpler taxes would give Main Street a boost, just as lower interest rates have buoyed the spirit of Wall Street. It may be that Federal Reserve Chairman Alan Greenspan has forestalled a credit crunch by restoring liquidity to the financial markets. But that may not be enough to stop a slide into near-recession. In a world increasingly starved for demand, tax cuts make enormous sense.

WHO'S WATCHING THE HEDGE FUNDS?

The saga of Long-Term Capital Management continues to amaze. It may be that hedge funds in general contribute to the overall liquidity and smooth functioning of markets, but LTCM's brush with near-death highlights the need for disclosure and oversight of all financial institutions, both by private lenders and by government regulators. LTCM's flameout came close—too close—to seriously hurting the entire world financial system.

Nowhere is this clearer than in the surprising new disclosure that LTCM engaged in risky equity arbitrage of enormous size and that it was the imminent blow-up of these positions that led the Federal Reserve to organize a bailout. Had the six major Wall Street investment houses with whom LTCM did business not come to its rescue, the stock market

would have been badly shaken and the firms themselves might have lost billions of dollars. LTCM, of course, presented itself to investors as a hedge fund that did "market-neutral" investing in debt instruments with little or no risk. They put it mildly, appears not to have been the case (page 10).

The lessons are clear. More disclosure is an absolute necessity in this age of leverage and global capital. Hedge funds are no exception. Someone must also be watching. They certainly must take an active role in monitoring their loans as well as the kind of derivative transactions they support. LTCM's wild ride shows that banks have a difficult time monitoring themselves, much less others. Federal regulators, for their consequence, must accept the fact that the public holds them responsible for the nation's financial stability.

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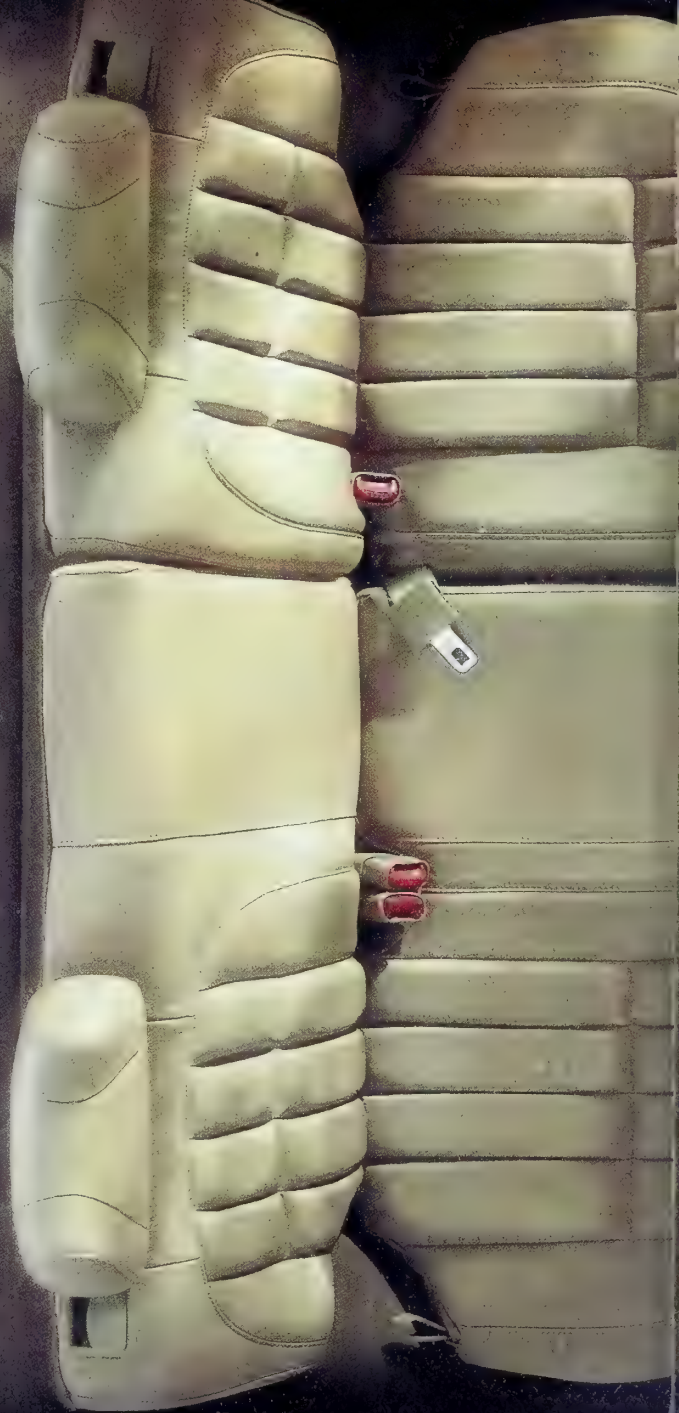
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TECHNOLOGY BUYING GUIDE

For Executives On The Go

PAGE 125





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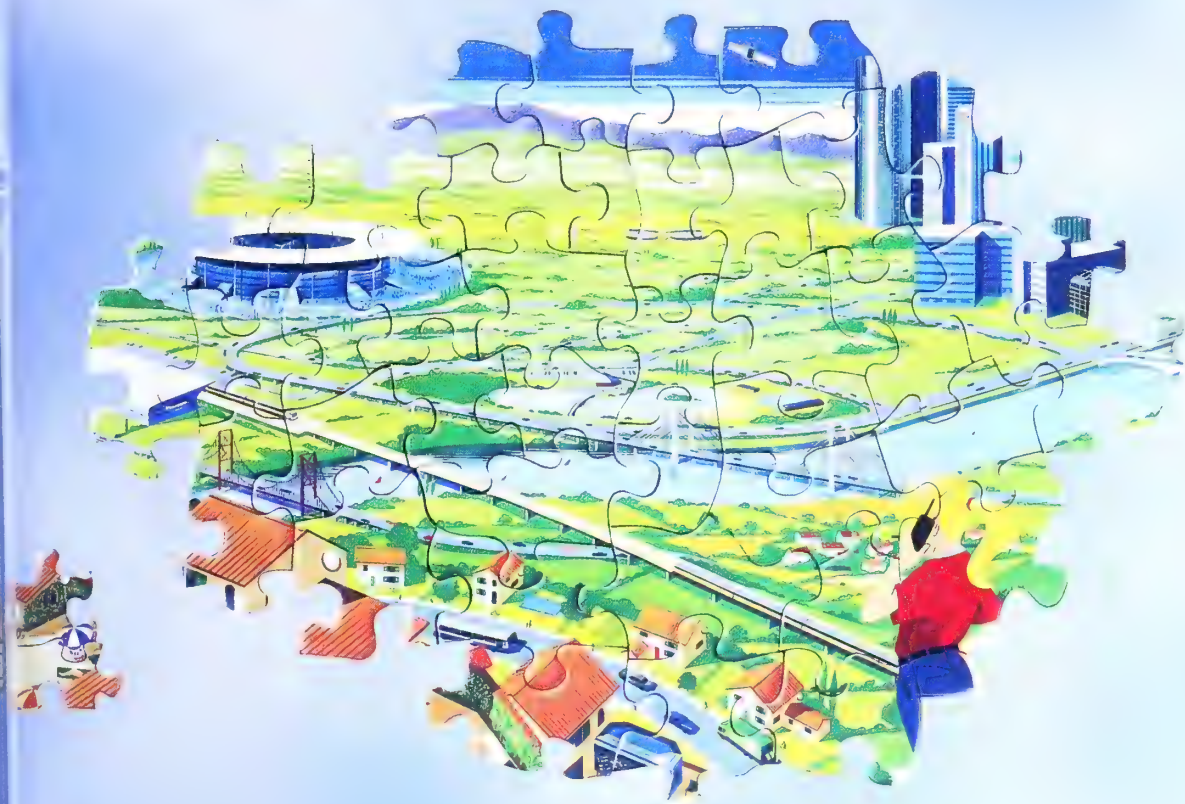
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TECHNOLOGY BUYING GUIDE

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BusinessWeek

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Up Front

EDITED BY JOAN OLECK

PAY PACKETS

A BIG FAT RAISE? FAT CHANCE

NEW YORK METS CATCHER Mike Piazza recently shared a seven-year, \$91 million pay package, the richest in baseball history. But when it comes to compensation, the rest of us won't be hitting any dingers out of the park. Raises for salaried workers at large companies will stay flat, at 4.1%, next year, a new compensation survey says.

Buck Consultants in New York City reports that the average salary hike for exempt employees in 1999 will remain the same as in 1997 and 1998. Executives will see a 4.3% projected pay rise.

This isn't draconian: Low inflation and an uncertain economy have companies



holding the line on salary increases, says Paul Gavejian, a principal at Buck. With inflation running about 2%, the real wage increase is also in the 2% range, meaning extra purchasing power.

Feel shortchanged? Take heart: Three out of four companies use hiring bonuses to attract talent, and half award bonuses to retain star performers. What's more, 27% of the 1,000 companies surveyed issue stock options to staff below senior management level. But scrumptious raises in '99? Fuhgeddaboutit. As they say in baseball, wait 'til next year. *Edward Baig*

BORDER PATROL

WAL-MART GETS SQUEEZED



CHECKPOINT: New reg nails the retailer

BEWARE THE GUACAMOLE police: The nation's largest retailer, Wal-Mart Stores, has been slapped with \$156,000 worth of charges by the Agriculture Dept. for illegally shipping avocados from Mexico to Iowa, Tennessee, North Carolina, Georgia, and Missouri. The charges are the first under a new federal regulation allowing limited avocado imports.

Those imports are the first

in 83 years, with good reason: Foreign-grown avocados can introduce pests and disease to the \$165 million U.S. crop. So the crackdown on Wal-Mart is no surprise.

"These are very serious charges," says the agency's Craig Reed. To minimize risk, the new reg allows foreign shipments into only 19 cold-weather states, from November to February. The USDA's 156-count complaint was filed

on Oct. 21 because Wal-Mart's untainted produce reached off-limits states.

Wal-Mart will fight it. Spokeswoman Betsy Reithmeyer argues that a third-party importer, not Wal-Mart, arranged the shipments and adds that the retailer cooperated. "Did we make an error? Yes," she says, adding: "I guess the USDA is using Wal-Mart as an 'education tool.'" *Dennis Blank*

TALK SHOW "Dull wins"

—Campaign slogan of Gray Davis, the newly elected governor of California, known for his political caution

BALLPARK FIGURES

HOW TO WIN YOURSELF A STADIUM

SAN DIEGO IS REAGAN country and one of the last places in America where you'd expect taxpayers to pony up for a new ballpark.

Yet on Election Day, voters gave the thumbs-up to a new downtown stadium for their National League pennant winners, the Padres. How? Credit a pro-stadium strategy that could prove a model for other down-on-their-luck teams in small markets: winning.

To field a pennant-grabbing club, the Padres raised their payroll from \$35 million in '97 to \$50 million this season—including \$4.8 million for ace pitcher Kevin Brown. Padres

majority owner John Moores says that assembling a team with the referendum mind "suggests a certain cynical attitude that I would rather resent." But equate happy fans with generous voters isn't necessarily cynical. And the reward was worth it: a 42,000-seat stadium—financed with the \$275 million voters approved, in addition to \$115 million from the Padres themselves.



BROWN: New hire

Would the team have spent so heavily without a referendum looming? Probably not. By rolling the pitchfork dice and buying a powerhouse club,

the San Diego Padres have landed a state-of-the-art stadium that may lift them out of the ranks of have-not clubs. Are you listening, Kansas City? *Mark Hyman*

THE LIST: DO YOU SPEAK BUSINESS?

"Current workplace language reflects a new, more competitive attitude as companies fight to survive," says CEO John Challenger, whose outplacement firm is compiling a workplace dictionary to fit these times. Some sample entries:

PEOPLE CHURNER	A boss who drives away talented people
INTER-ECON WORKER	Person capable of tackling a host of tasks and working as needed
BOTTOM FISHER	Person willing to dive into seemingly hopeless situations
SKILL-SHORT COMPANY	Lacking experienced workers, often because of job cutbacks
PROTECTED CLASS	Workers with experience badly needed by skill-short companies
BOOMERANG WORKER	Retiree returning to former employer
CLOCKLESS WORKER	Working management-style, not strictly 9 to 5; committed
TOXIC EMPLOYEE	Worker with anti-employer reputation or attitude
GENDER BLURRING	The increasing obsolescence of jobs perceived as "male" or "female"

DATA: CHALLENGER, GRAY & CHRISTMAS



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Up Front

ASSEMBLY LINES

'O. K., THINK—WHERE IS THAT WRENCH?'

MILLIONS OF PARTS go into building a Boeing jet, but sometimes there are a few parts too many: Stray bolts, trash, and wrenches find their way into finished planes. To control this problem, mechanics at Boeing's Everett (Wash.) plant now must check out their tools at the start of each shift, then check them back in. It's all part of an effort to stop FOD—foreign-object debris—on new planes.

The hazards can be serious. "We were getting reports from the airlines finding flash-

lights and stuff like that in places that are supposed to be sealed," says Dennis Carpenter, Boeing's 777 field liaison. One plane was grounded after a flashlight was found sealed inside its wing. The problem only surfaced because the flashlight's corroded batteries shorted out a landing light.

Beyond the safety factor is the financial one: FOD costs Boeing and its clients up to \$4 billion a year in repairs, the company says. So Boeing is offering noncash prizes for the most FOD retrieved. The idea is a hit: One eagle-eyed cable rigger at Everett has found so much debris she's now known as "FODzilla."

Lorraine Woellert



CHARITY CASES

DOM PERIGNON, TEDDY?

ONE WAS OUTFITTED IN A leather outfit from Hermès' 1998 winter collection. Another sported a Breitling watch. Yet another held a Davidoff cigar. These luxuriously appointed jet-setters were—get ready—teddy bears.

A total of 42 handmade mohair bears crafted by Germany's Steiff and outfitted by Hermès, Louis Vuitton, and 40 other luxury companies were up for auction in Brussels on Nov. 6. Said organizer Alain Sernels before the gala: "This event is definitely not for children." More than 500



STUFFED: But so much style

teddy bear fanatics were flying in from as far away as Japan and the U.S. and paying \$1,000 for the privilege. The goal was \$5 million for a Belgian children's hospital. That sum looked possible: One Steiff bear from 1902 fetched \$175,000 in 1994, while a contemporary Steiff attracted \$75,000—without haute couture garb.

Luxury makers can be loath to lend their image to other products—but not here. "We don't make teddy bears," said Louis Vuitton's Anne Visart. As for those cuddly items: "We'll sell these bears just like you sell Picassos," boasted François

De Jonker of the Belgian Chambre du Haut Commerce, the event's sponsor. So how much would a Picasso bear fetch? William Echikson

DRAWN & QUARTERED



PRODUCT PEEK

THIS CREDIT CARD IS QUITE A LOOKER

HOW HARD CAN IT BE TO fit a credit card with a tiny rectangular magnifying lens? Chase Manhattan Bank needed four years to do it. First, Los Angeles inventor Alan Finkelstein had to come up with the idea: He realized that middle-agers and up often use credit cards but can't read their restaurant bills. So why not install a built-in magnifying glass?

Finkelstein pitched the project, Chase bought it, and the LensCard was born. Well, conceived. A spokesman says it took four years of trial and error to produce a card with a 1¼-by-¾-inch lens that still

held up under the imprint machines and other wear a tear of life as a credit card.

Chase finally launched a no-fee card—which carries a standard interest rate—in early October in MasterCard and Visa varieties. Do a gimmick? Or scoff, particularly



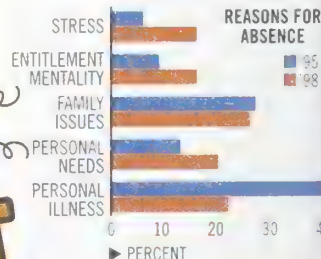
NOW YOU SEE IT: Chase's new card

you're over 40. That's the age when presbyopia—natural hardening of the lens—sets in. It happens, alas, to us all. So... Where'd we put the credit card? Jeanette Bro

THE BIG PICTURE

WHY WORKERS DON'T SHOW UP

Illness, long the chief cause of work absences, has lost ground to newer excuses: "stress" and "entitlement mentality"—i.e., "I've worked my tail off; I deserve time off." The message? Pay attention to employees' emotional well-being.



FOOTNOTES U.S. workers who watched Web simulcast of John Glenn launch: **5 million**; productivity loss: **\$18.7 million**

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HIGH-DEFINITION TV: WHO NEEDS IT?

When 20% of the population controls 80% of the wealth, can 85% of households afford such a luxury as an HDTV ("Digital D-day," Cover Story, Oct. 26)? I come from a middle-class household, and if I had several thousand dollars burning a hole in my pocket, I would find something to spend it on other than a digital TV.

I, for one, refuse to be bullied into purchasing the next state-of-the-art, overpriced toy. I don't plan on replacing a perfectly good TV just because broadcasters and TV manufacturers made it

obsolete. Not being able to watch TV will hardly be a tragedy and may be a blessing—by breaking what has become nothing more than a bad habit.

Stacie A. Sybrandt
Camp Hill, Pa.

The transition to HDTV would be much easier if we were not burdened with obsolete over-the-air broadcasters. Let cable and direct-broadcast satellites take over the distribution function. Television will be better as a result.

Jack Haley
Warner Robins, Ga.

THE COMPLEX WORLD OF GLOBAL HEDGING

"Perils of the hedge highwire" (The Corporation, Oct. 26) highlights an issue that has been the subject of endless debate among corporations and investors. You build a case that "locking in exchange rates isn't always a great idea." The topic is more complex. The problem is threefold:

1. Identification problem: The FX [foreign exchange] exposures you cited are real exposures, not nominal ones. Not a single corporation mentioned identified the exposures as such.
2. Accounting constraints: The accounting framework in which U.S. cor-

porations operate ensures that corporations adopt a simplistic, transactional "paper trail" approach. This frequently magnifies the flaw cited above.

3. Limited hedging tools: Most banks and investment banks market off-the-shelf nominal FX hedging products, which are inappropriate for the exposures you mention.

It is true that "natural hedges" are an improvement over nominal FX products, but they break down when governments adopt policies that interfere with the smooth functioning of the private sector. For instance, the imposition of price controls in a foreign country can destroy the local cost-revenue

HDTV: AN 'OVERPRICED TOY'

"I, for one, refuse to be bullied into purchasing the next state-of-the-art, overpriced toy. I don't plan on replacing a perfectly good TV just because broadcasters and TV manufacturers made it obsolete."

balance, making the global earnings picture even worse. There are financial alternatives to structural hedges, but naive accounting framework only reinforces what your article implies: Corporations would rather be exactly wrong than approximately right.

Eileen M. DeB
Vice-President
Global Risk Management Services
Bank of New York
New York

LET'S REGULATE ALL SOFTWARE —NOT JUST GO AFTER MICROSOFT

While reading about Microsoft Corp.'s business plan and U.S. District Court's decision in "No letup—and no apologies" (Information Technology, Oct. 26), I found myself once again longing for the software equivalent of the Food and Drug Administration.

A day or two before, I had read about a situation in which different recipients of the same electronic-mail re-

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ge received significantly different versions. A meeting had become contentious because some key figures did not reach everyone on the list. The author took pains to point out that "this is a 100%-pure-Microsoft situation, involving no version of Word more than a year old." In the same time frame, my windows 95 desktop was invaded by a flurry of messages saying that the application had performed an illegal operation and would be shut down. The application? When I ask for more information, it always tells me it is Windows Explorer. As far as I can determine, this is common for users of windows 95.

Microsoft surely is not the only offender: Most of the software we use is complex even to function reliably. I am not at all pleased by the prospect that the mind-set that has produced it all will soon manage entertainment consoles, PC phones, milk-purity monitors, check scanners, fast-food ordering kiosks, and many more critical items. And they tell me that by opening the package, I am accepting the caveat that there is absolutely no guarantee the software will work. I am much more concerned about this than whether or not Microsoft is a monopoly.

Charles J. Wertz

Associate Professor

Computer Information Systems

Buffalo State College

Buffalo

WANT BASE B-SCHOOL RANKINGS STUDENT SURVEYS

I read "The best B-schools" (Cover story, Oct. 19) and noted the article on schools attempting to bolster their rank by encouraging students to inflate survey answers. As a '98 MBA graduate, as well as a participant in the recent survey, I appreciate the fact that you have at least identified the problem of biased survey results.

Regardless of whether or not there is an attempt on campuses to sway the results, I wonder why you would use as one of the rankings a metric that is so obviously flawed. Every student responding to the survey is presented with a subject of interest. BUSINESS WEEK's rankings are visible throughout business and it clearly helps a student's case—as well as his self-esteem—to see his school perform well in the rankings.

I struggled with the issue, torn between answering honestly on the survey and presenting my school favorably. I urge you to remove this variable from the rankings formula. While I recognize the value of measuring the quality of the program from those closest

to it, student surveys are just not an objective enough measure.

Doug Rosien

University of Notre Dame MBA '98

Manchester, Conn.

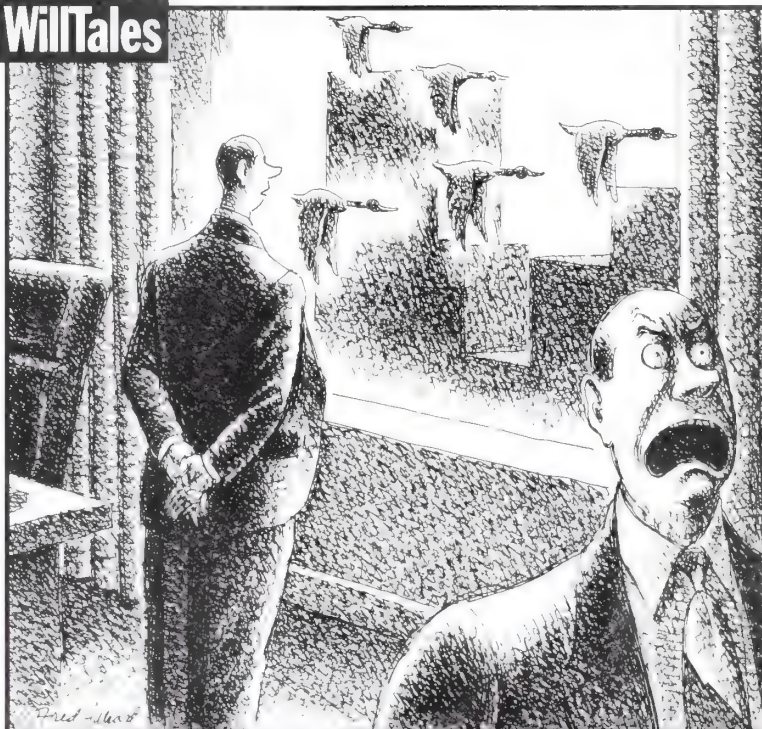
HOW PATENTS SPUR INNOVATION

"What's next—a patent for the 401(k)?" (Legal Affairs, Oct. 26) completely misses the key benefits that patents deliver—to patent holders and

to society as a whole. Patents don't slow the spread of innovation; they accelerate it. By definition, a patent is a contribution to a common pool of learning with the promise to teach it to the world. In return for 20 years' worth of rights, the inventor is legally bound to have his idea and its underlying concepts published for all to see. Others can build on the idea, enhance it, and create new concepts they can own with a similar promise to teach. Inventors unwilling to license their inventions will lose out,

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PUTTING THE GOP CONGRESS IN A BAD LIGHT

I am not too happy with the action that has taken place in Congress during this past year, but your article does not tell the whole story ("The 106th Congress: How the Republicans Did It," Washington Outlook, Oct. 26). It may have been a blessing that some or all of the initiatives that were mentioned in the column went to the legislative boneyard." The antismoking and campaign-finance-reform efforts, for instance, were both dumb ideas. Believe it or not, sometimes the best package coming out of congressional deliberations is bad law.

The most distressing aspect of the column, though, is the way in which Congress and the President are portrayed. All the so-called bad action/inaction is shown as the fault of Congress, while the President is shown just trying to get his "education initiatives" implemented. The Republican use of some of the budget surplus for a tax cut is portrayed straight out of the Clinton spin book as a "reckless run on Social Security." But the President's efforts to use that same budget surplus to fund "education initiatives" is portrayed as a "lofty fight."

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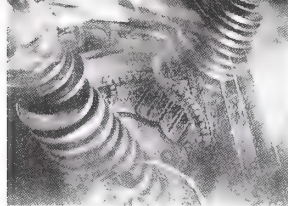
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lls show less regard for Congress than
ey do for the President? The Ameri-
n people practically never get the
mplete story.

Russell W. Whipple
Mason, Mich.

A GLOBAL ECONOMY, L PARTS NEED TO PROSPER

'So, what is really going on out
re?" you ask, in "The age of uncer-
ty" (Editorials, Oct. 26). For a more
mplete answer, look to the principles
systems thinking. A "confluence of
nts" is not the only thing masking
true fundamentals of the global
nomy, creating this "fog" you refer
The "fog" is being created by the
endency to see globalization from a
spective grounded in our history of
ng in a world of separate, indepen-
t nations. The world's economy has
ome one interdependent system, yet
continue to view it through inde-
dent eyes.

What's really going on, from a sys-
s perspective, is that a new, single,
bal system is struggling to be seen
what it is—a system that can pros-
only if all of its parts prosper. It is a
le system, one that innately knows
either all of it will make it or none
will. That's the way healthy sys-
s work. The business world will
per beyond its wildest imagination
it cuts through this fog and stops
ving the future through "past-fod-
d eyes."

Steven G. Brant
President
Trimtab Management Systems
Brooklyn, N. Y.

MARKET FOR AMPLIGEN LD BE VAST

or the past several weeks, we have
d disparaging assertions by Manuel
asio about chronic fatigue syndrome
and the potential profitability of
ligen ("Why Hemispherx could take
' Inside Wall Street, Sept. 28). At
are whether Ampligen is an effi-
us treatment for CFS, whether there
sizable market for this drug, and
her the value of Hemispherx Bio-
ma stock should decline.

is difficult to come up with a solid
er to estimate the size of the po-
al market for Ampligen. Because
me methodology shortcomings, the
Centers for Disease Control &
ention estimated number of cases of
nderestimate the true picture. For
ple, the early CDC figures did not
le a potentially large group of peo-
vith CFS who gave up seeking
a care because they were treated

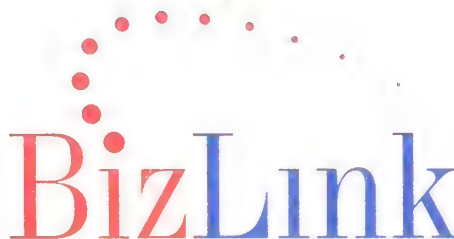
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Guts....



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Readers Report

so derisively by their doctors. Additionally, those early numbers would not capture the people who don't meet every criteria for a CFS diagnosis but would nevertheless benefit from Ampligen.

Our organization has received a tremendous number of inquiries about the availability of Ampligen. For the most part, these people would be willing to spend the money if they could get

their symptoms under control by such a pharmaceutical agent. As of this writing, Ampligen is undergoing clinical trials and has not yet been approved by the Food & Drug Administration. While we cannot quantify with certainty the exact incidence of CFS and we cannot project the exact market size for Ampligen, we disagree with Mr. Asensio's statements.

Ronald B. Gilbert

President

Chronic Fatigue Syndrome

Society of Illinois

Skokie, Ill.

means stop the trading of personal information. But the customer will be able to trace the source and those unlawfully benefiting from it. As you can see, my knowledge of the Net is negligible, but sometimes a simple, nonelectronic solution can be the answer.

David Go

Barcelona

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TO TRACK NET PIRATES, PLANT FALSE INFORMATION

I am a first-time user of a PC and have just about managed to use it as an expensive typewriter. I am still light-years away from being a Net-surfer. However, when it comes to Net privacy and safeguarding personal details ("Now it's your Web," Special Report, Oct. 5), one idea occurs to me:

Each time you "opt in" to provide data to a vendor, you should include a false piece of information. And for every "opted in" vendor, use a different false detail. Doing this will by no

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BY ROBERT KUTTNER

THE U.S. COULD USE A DOSE OF EUROPE'S PRIVACY MEDICINE



SENSIBLE:
The EU's new rules drastically limit the ability of companies to sell data on consumers—and that's a good thing

The European Union has just enacted a new law for the protection of privacy that raises intriguing questions about the relationship between property, liberty, government, and the rules of global trade. It also portends more conflict between the U.S. and its European trading partners, as their economies become ever more tightly linked.

The EU's directive, which took effect on Oct. 25, drastically limits the ability of companies to market data on consumers, something taken for granted in the U.S. This is not a case of pointy-headed bureaucrats running amok. The EU's policy reflects what has long been a much tougher approach to consumer privacy throughout Europe. The directive requires member nations to enact conforming national laws. Six countries comply now.

Most of Europe already limits telemarketing. The new rules extend this to junk faxes and E-mails. The existing laws of individual European nations have stricter rules on commercial data collection, as well as entire agencies making sure government and private data on citizens are used only for their original purposes. To some extent, these safeguards reflect a greater European anxiety about Big Brother, given the Continent's experience with totalitarianism. Yet they recognize—appropriately—that Big Brother can be a commercial data bank as well as a state agency. Americans have resisted government-issued identification cards as an invasion of liberty and privacy. Most European nations use such cards, with important benefits to law enforcement and public health, but balance them with comprehensive privacy protections.

COMMON LAW. France and Germany, among other nations, legally codify a right to privacy. The U.S., supposedly the more libertarian nation, has no such generic right. Rather, as Supreme Court Justice Louis Brandeis long argued, the fundamental right "to be let alone" can be inferred from the common law. If I publicly disseminate your personal letters, I may be sued for appropriating a literary work or for violating an implicit contract—but not necessarily for a more general breach of your privacy.

The new EU directive creates a general right for citizens to opt out of private databases. If a citizen requests it, data collected for one purpose—say, a credit-card purchase—

cannot be bought and sold for other purposes. This provision is a deadly assault on the now vast direct-marketing industry, and it affects anyone selling to a European consumer, including an American company.

U.S. trade negotiators are fighting the directive, on the grounds that it violates free trade. This is a battle they are likely to lose. Indeed, the Europeans are not content simply to protect European consumers. The EU also wants the U.S. government to increase privacy safeguards for American shoppers. If this demand seems a little cheeky, please recall that the U.S. has long thrown around its weight on trade matters. We want the Japanese to change their distribution system; the Brazilians to accept our conception of intellectual-property protection; the French to modify their cultural policy; the Canadians to cut subsidies; and the Middle East to accept American norms of what constitutes bribery.

AMERICAN RULES. As different customs and systems of laws become interlinked by trade, common ground rules for commercial practices must be negotiated. But the laws of commerce slop over into cherished national customs and values. Notwithstanding post-cold war rhetoric about the "end of history" with its facile claim that there is one true model of capitalism and democracy (which just happens to be the American one), it is not realistic to expect that other nations will simply embrace American rules. It does no work to say that we are simply enforcing "free trade," because issues of property rights in databases and intellectual property are legal constructs that may reasonably differ from country to country.

It's more likely that the U.S., as well as Europe, will need to compromise if there are to be viable rules for global commerce. That's not such a bad thing. Although libertarian ideology holds that property rights are paramount—even that they anchor other rights—the reality is considerably more complex. A telemarketer's right to invade my dinner or an insurance company's view of my medical records as mere property must be balanced against my rights as a citizen. We Americans happily import sophisticated European products—French wines, Italian fashions, German autos. We should consider importing Europe's more evolved and balanced conception of privacy.

Robert Kuttner is co-editor of *The American Prospect* and author of *The End of Laissez-Faire*.

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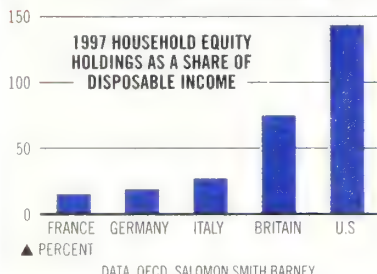
FALLOUT FROM MARKET SWINGS

U.S. exposure vs. that of Europe

What a difference a few days or weeks can make in investor sentiment. Stock markets have surged higher in the wake of the Federal Reserve's twin interest rate drops, a strong third-quarter growth report, and G-7 backing of new measures to fight financial crises. Meanwhile, credit spreads have begun to narrow, and corporate-bond issuance has picked up steam.

Of course, there are still clouds on the horizon. Some 40% of the global economy remains mired in recession,

AMERICANS' HOPES RIDE MORE ON THE MARKET



the outlook for emerging-market giants China and Brazil remains problematic, and some slowdown appears unavoidable in the U.S. and Europe.

That's why the stock market's latest rally is so heartening, especially for the U.S. economy. Americans are far more sensitive to stock market declines than Europeans, say economists at Salomon Smith Barney—and for good reason. In the U.S. last year, household stock holdings amounted to 143% of disposable income. But in Europe, with the exception of Britain, they averaged only about 20% of disposable income.

Americans' greater market exposure also shows up on household balance sheets. Excluding stock market assets, the ratio of household liabilities to (non-equity) financial assets last year was 122% in the U.S., compared with an average 90% in France, Germany, and Italy. So a stock market rally—or correction—tends to have a larger and more rapid impact on U.S. consumption than on European spending.

Meanwhile, on the business side of the economy, Corporate America is

more sensitive than Europe to capital-market conditions, observes economist Stephen Roach of Morgan Stanley Dean Witter. Some 46% of U.S. corporate financing occurs in the capital markets, he notes, and 31% comes from banks. In Germany, by contrast, corporate bonds and money market paper account for just 2.6% of corporate debt, and bank loans for a huge 69%.

The upshot is that the recent improvement in the bond market matters a lot more to U.S. than to European companies, who were spared the financial pressures felt by their American peers. Europe's greater reliance on bank debt, however, could prove to be its Achilles' heel. Roach points out that European banks' exposure to emerging-market debt—including heavy loans to Latin America—comes to 7% of the region's gross domestic product, compared with 1.4% of GDP for American banks.

Thus, while European banks have yet to tighten credit significantly to their corporate clients at home, there's still a risk that new defaults in Latin America and elsewhere could seriously crimp their lending ability.

CYCLES OF DEATH AND REBIRTH

How small business churns out jobs

Here's a puzzle: The Small Business Administration reports that businesses with less than 500 employees accounted for 76.5% of the 6.85 million private-sector jobs added to the economy between 1990 and 1995. Yet it also notes that the small business share of employment has actually been slipping—from 54.6% in 1988 to 52.5% by 1995. How can these reports be reconciled?

The answer, says the SBA, is that the job creation numbers count net employees added by businesses originally classified as small in 1990 (or later if they were founded in subsequent years). But the 1995 analysis of employment shares looks only at the status of concerns in that year. So it may well be that the smaller employment share of

AN ANATOMY OF EMPLOYMENT GROWTH

PRIVATE SECTOR JOB GROWTH* 1990-95 BY BUSINESS SIZE

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small business may actually reflect the fact that many successful small firms grew a lot larger or were acquired by bigger outfits.

What's clear is that small business generated much of the net job growth in recent years—even as many bit the dust. Between 1989 and 1995, reports the SBA, 2.9 million companies were born, and 2.6 million died.

DO POLLUTION REGS COST JOBS?

Los Angeles' experience says no

Critics of environmental regulation often charge that their high costs hurt business and thus impede or reduce employment. Others point out that pollution abatement activities can result in the creation of new jobs, but that the ultimate effect on labor demand is uncertain.

In a new National Bureau of Economic Research study, economists David Berman and Linda T. Bui of Boston University assess these effects by comparing changes in manufacturing employment in regulated plants in the Los Angeles area from 1980 to 1992, with changes in the rest of California and across America. In the period under study, air pollution regulations in the Los Angeles air basin were tighter considerably—to a degree far in excess of that prevailing elsewhere in the state or nation. At the same time, manufacturing employment in the area declined as it did in many areas in the country.

The study revealed that the new regulations imposed heavy investment costs, exceeding an average of \$500,000 per plant in the area, with outlays for oil refineries especially high. But the authors found no impact on the number of manufacturing plants leaving or entering the area. And they found a slight positive effect on employment, possibly due to the hiring of people to maintain abatement equipment and ensure compliance.

"Plant managers interviewed complained about the regulations but reported no adverse impact on jobs," comments Bui.

Indeed, a follow-up study by Berman and Bui found that productivity in refineries in the Los Angeles area was higher than in similar plants in Texas and Louisiana—apparently because the need to invest in pollution abatement equipment accelerated management decisions to invest in other more productive technology.

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touch with our customers, so that we can do a better
job of matching our research to customer needs.

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same way as a human eye. It's creating new
business opportunities in entertainment, building
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An "Eye" That's Almost Human

Like the key component of the human eye, Mitsubishi Electric's patented **Intelligent CMOS Image Sensor (ICIS)**-- the first of its kind in the world -- provides not only realtime images, but also a new vision of products and services to come.

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- * Like a video game in which you're part of the action...
- * A building security system which senses the slightest movement of an intruder...
- * A tiny mobile camera which allows you to transmit images via mobile phone no matter where you are...
- * Or a way to enter your automobile or home in which your unique fingerprint replaces your key.

"The exciting thing about this technology is that it has many practical applications which create new markets," says Dr. Kazuo Kyuma, head of the ICIS Business Promotion Project at Mitsubishi Electric and the man who conceived the ICIS.

Equally exciting is the fact that its revolutionary design, which includes 150 patents, provides dramatically superior performance.

Its realtime image processing is ten times faster yet consumes ten times less power than the CCDs (charge-coupled devices) which currently help provide images, and in a smaller, lighter module.

"As semiconductors are the heart of the electronics industry," says Dr. Kyuma, "the ICIS will become the 'eye' for a range of new industries."

The ICIS also represents a new approach in research and development.

During a year as a researcher at the California Institute of Technology, Dr. Kyuma was astonished to see how scientists were also business entrepreneurs -- turning their ideas into market realities.

He's used that concept to create a research team of 14 Mitsubishi Electric engineers with the differing hardware and software skills needed to develop the ICIS.

"The Wright Brothers watched birds, and designed the first airplane," he notes. "I studied the human retina, and designed the ICIS."



Nintendo's Game Boy Camera is a hit product

"Hidden" Electronic Magic

When some people were dreaming of the "system on a chip" era, we at Mitsubishi Electric were already shipping products.

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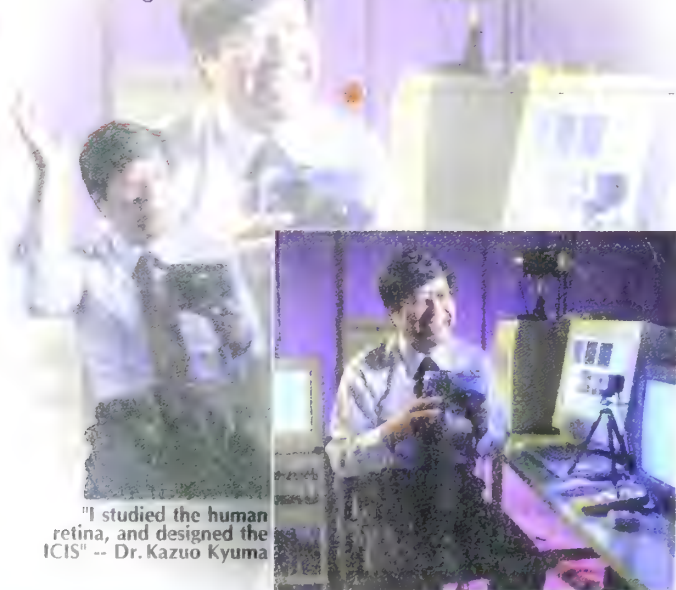
Perhaps the most exciting product of the future, again made possible by eRAM's key advantages -- faster image processing in a lighter, more compact chip -- is a new type of mobile phone. It will feature a larger display for downloading and reading email, plus a tiny camera capable of transmitting images by radio waves.

Imagine traveling to a beautiful mountain resort, taking "live" pictures with your mobile phone, and then sending those images, real-time, to your friends many miles away so they can enjoy them with you at the same time.

You may even be able to experience a realistic "virtual world" without leaving this world, thanks to eRAM.

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"I studied the human retina, and designed the ICIS" -- Dr. Kazuo Kyuma

We're Market-Oriented

The stories on these pages dramatically illustrate how Mitsubishi Electric is re-focusing to maximize our great strength in leading-edge technologies.

To be a player in these highly competitive fields, you must be able to make quick decisions. We've reorganized our company so that researchers and marketers can focus more precisely on customer needs.

We're also very conscious of the bottom line. We're putting our efforts only into leading-edge fields with the greatest potential for growth and profitability.

Our innovative spirit means we have an eye for your future -- because that's part of our future, too.



Ichiro Taniguchi,
President

A Bridge in Space

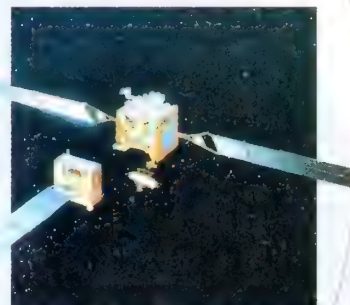
For more than 30 years Mitsubishi Electric has been a leader in Japan satellite industry, and over this period we have been involved in nearly 200 satellite programs worldwide.

Mitsubishi Electric has developed **the world's first unmanned spacecraft docking system** and in July 1998 this system was successfully tested in orbit.

The experience we have gained from testing this new "bridge in space" will be used in the unmanned space carrier that will supply the International Space Station operated by Russia, the United States, Japan, the European Space Agency (ESA) and Canada.

Mitsubishi Electric has now successfully entered the commercial satellite market and in October 1998 was appointed as the preferred supplier and prime contractor by Cable & Wireless Optus in Australia to supply their **next generation C1 Satellite**. Mitsubishi Electric has also celebrated the ground breaking ceremony at our Kamakura Works for an expanded, comprehensive satellite assembly and test facility.

We are excited by the opportunities that this new space business offers and the chance to demonstrate to our customers our proven ability to deliver highly sophisticated systems of superior quality at a competitive price, and on time.



The world's first unmanned spacecraft docked (photo courtesy of NASDA)

Digital Broadcasting Era Begins

A new era of digital broadcasting begins in Japan. Mitsubishi Electric's technology is a key role. Digital compression know-how is part of a **television encoding/decoding system** being used by key CBS Television stations for both broadcasts and transmissions between television stations. The system provides the most efficient encoding/decoding system yet offered for DTV. In the next five years, digital takes over as the dominant broadcast technology, and digital transmission is rapidly expanding for our unique system.



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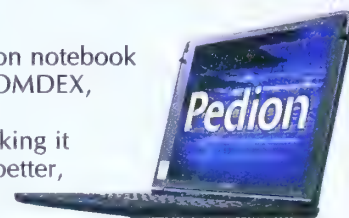
It's easy to see why the Mitsubishi Pediton notebook computer won top honors last year at COMDEX, the largest electronics show in the U.S.

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THE CORROSION OF CHARACTER

The Personal Consequences of Work in the New Capitalism

By Richard Sennett

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YOU HAVE A JOB, BUT HOW ABOUT A LIFE?

Richard Sennett's *The Corrosion of Character* had me repeatedly musing on some obscure but durable lines of poetry: "We are free, free, free—/ like empty sailboats lost at sea." The author, a minor poet named Tess Slesinger, was reflecting on a different era, the 1920s. But the two writers have a similar focus: a freedom that, for all of its promised exhilaration, leaves us wanting. As his subtitle indicates, Sennett explores "the personal consequences of work in the new capitalism." In our flexible, reengineered economy, Sennett asserts, we are unmoored—from our pasts, our neighbors, and ourselves. Our newfound liberty may be so costly and attenuated as not to be liberty at all.

Sennett, a sociologist at New York University, is among the country's most distinguished thinkers. His books—including *The Fall of Public Man*, *The Conscience of the Eye*, and *The Hidden Injuries of Class* (co-authored with Jonathan Cobb)—rate comparison with David Riesman's classic *The Lonely Crowd* and the incisive social critiques of the late Christopher Lasch. Sennett's works span 25 years of thinking about and observing our civic selves and civic spaces. His 1994 work, *Flesh and Stone*, considered the human body in relation to the urban environments we make for it. The book began in ancient Athens and ended in modern New York.

The Corrosion of Character may not seem to possess the sweep and ambition of these earlier works. But don't be misled, for Sennett has concentrated into 176 pages a profoundly affecting argument as to what we are doing to ourselves as we reshape our work to stress short-term goals, chop-and-change professional paths, decentralized structures, incessant risk, and teamwork as against the hierarchies of yesteryear. Although Sennett has long been understood as a

liberal-left thinker, this is not a shrill call to turn back the clock: His purpose lies more in showing us where we are going. At the end of this road, he says, is the decay of personal character. "Character is expressed by loyalty and mutual commitment, or through the pursuit of long-term goals," he writes. "How do we decide what is of lasting value in ourselves in a society which is impatient, which focuses on the immediate moment?"

Central to this book are the notions of fragmented time and its consequence, the loss of coherent personal histories with beginnings, middles, and ends. "Career," Sennett points out, originally meant a carriage road—and as applied to work, a clear path forward. We can no longer count on that. As he notes, these days one is advised to anticipate 11 job changes during a typical working life. And as we move from island to island in our corporate archipelagoes, friendships and community ties take on "a fugitive quality."

In this context of atomized personalities and communities, Sennett astutely points out, some of us tilt toward Main Street nostalgia and the cultural conservatism that often goes with it—resentment directed toward welfare mothers, calls for reduced immigration, and so on. Seldom do we recognize, however, that the vain search for idealized communities is precisely in reaction to the conditions of work that we've erected in the name of flexibility and efficiency.

That's the thesis, in a nutshell, and exploring it sounds daunting, doesn't it? Well, Sennett has never been less than challenging. *The Corrosion of Character* is closely argued, and the intellectual

rigor pays off. Along the way, the author draws in everyone from philosophers Diderot and Adam Smith to sociologist Max Weber and journalist Walter Lippmann. He also introduces us to high-flying consultants, laid-off IBM executives, bakers on the overnight shift, and a barkeep who tried life in the glass-and-concrete towers only to conclude that she preferred the brass rail.

Sennett takes up many dimensions of life in the new corporation. High among them is the shift from individual effort to teamwork, which he calls "the work ethic of a flexible political economy." Because it relies on "the fiction of harmony," teamwork stresses mutual responsiveness at the expense of original thinking. Unity requires the team to confine its members to specific tasks and superficial processes, without much reference to either the experience or perspective of individuals. In the team context, you no longer have a boss—you have a "leader." This obscures ordinary power relations.

A condition Sennett calls "power without authority." Above all, Sennett says, the team disallows conflict—so turning itself into a new form of domination.

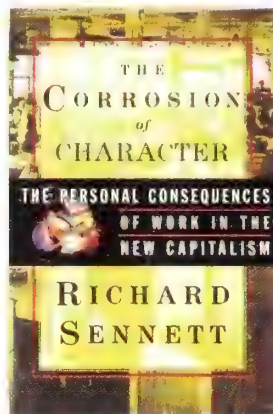
This takes us to Sennett's conclusion. In his final chapter, "The Dangerous Pronoun," he examines the idea of community, including the version advanced by those who call themselves the communitarian movement. The "we

of these intellectuals who emphasize individual sacrifice and common moral standards creates a false cohesion, obscuring conflict, he says. "There is no community until differences are acknowledged within it. Teamwork, for instance, does not acknowledge differences in privilege or power, and so is a weak form of community."

That sort of acuity runs throughout *The Corrosion of Character*. You may not agree with Sennett's arguments, but he'll lead you to new places. That's every writer's challenge, and Sennett meets it admirably in this book.

BY PATRICK SMITH

Former *BUSINESS WEEK* editor Smith contemplates the New Economy from a dairy farm in Connecticut.



THE NEW ECONOMY'S FLEXIBILITY, SAYS SENNETT, COMES AT A STEEP COST TO OUR HUMANITY

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How the Next Healthcare Revolution Will Change Your Company

It's back—the healthcare debate, that is.

Much of the chatter comes from impatient consumers who, through anecdotal stories, have created a maelstrom of bad feelings about HMOs. And while Americans seem relatively satisfied with the kind of healthcare they receive, the national perception seems to be that the way is delivered just doesn't cut it, especially when it comes to managed care.

Recent surveys point to the potential of the issue. A Time-CNN poll reports that Americans trust physicians, nurses, hospitals, and drug companies more than they trust HMOs. The majority of those polled by NBC and *The Wall Street Journal* said that HMOs have worsened the quality of healthcare services. And 60% of those contacted in a 1998 Health Confidence Survey by the Employee Benefit Research Institute in Washington, D.C., found that the healthcare system is in need of major refinement.

In the legislative arena is responding to a myriad of new legislative proposals (which range from giving consumers the right to select their own physician to mandating hospital length-of-stay requirements) that are expected to dramatically alter the healthcare business altogether. While there is no telling which, if any, proposals will prevail when the legislative debate ends—or how they will affect patient care, many experts sense an emerging trend: the healthcare system is entering the throes of a momentous power struggle—from employers demanding reduced costs to consumers seeking

their own control over those costs, not to mention access to care and quality of care.

Not that employers are no longer interested in healthcare trends. After all, they drove the transition of the American healthcare delivery system from one based on "do whatever it takes to cure the patient" to "let's make affordable treatment decisions." Employers were compelled, of course, by benefits budgets blown out of control in the 1980's. Indeed, managed care organizations came into their own by reining in those spiraling healthcare costs. And by most measures, they have done so successfully. Throughout the 1990's, healthcare costs have fallen, and managed care organizations of various sizes and shapes (including but not limited to HMOs) now cover the lives of 85% of the American populace.

Managing Managed Care

But the decade is ending. And in the wake of declining stock valuations for many HMOs and even a few spectacular financial failures, some industry observers are envisioning the next era in the healthcare revolution. And they believe healthcare consumers are the newest force to shape healthcare delivery: Individuals are starting to make more frequent and significant decisions about what they're willing

to pay for healthcare—and to whom.

The response of the healthcare industry is to create new services and products to attract those fledgling consumers. According to KPMG Peat Marwick, LLP, preferred provider organizations (PPOs) and point-of-service (POS) plans enhanced their market share from March 1997 to March 1998,

reflecting the public debate about greater consumer choice of providers. HMOs and conventional insurance plans lost market share over the same period.

Healthcare organizations must also respond to the cry for consumer protections. In addition to the issues of physician choice and minimum hospital stays, legislators are examining such steps as prohibiting health plans from using financial incentives to encourage case managers to limit or deny care—or physicians to withhold information on expensive laboratory tests. Consumers also are in a furor about ensuring access to emergency room care, as well as mental health and vision care.

Quality, Access, and Costs

It might seem that consumers want to have their healthcare cake and eat it, too—meaning, they want the very best medical treatments as employers demand the very lowest costs. But that's exactly why many

industry observers think this new healthcare revolution may be the industry's best hope to spur marketplace competition and enhance quality, without government intervention.

And that spells good news for employers' interests in continuing to keep costs under control. First, however, consumers must learn to understand and trust managed care, in all its existing and yet-to-come permutations. Until recently, there has been a lack of available consumer-relevant information, such as how to pick a health plan or which one offers the best "quality" services. How does a consumer know, for example, whether he'll be screened for prostate cancer or whether she'll be monitored for breast or cervical cancer? How can a diabetic consumer be assured of regular eye exams or an elderly person receive an annual flu shot? Considering the wide availability of consumer tools for other purchases, such as automobile safety ratings, the absence of such information is perhaps astonishing.

So the scramble is on to develop meaningful "report cards." For example, the Employer Quality Partnership (EQP) in Washington, D.C., made up of seven employer groups, is banking on the increased use of information to foster marketplace competition. EQP's toll-free telephone number (800-260-3783) and Website (www.eqp.org) give both consumers and employers important tips on what to consider when rating health plans.

Many health plans now are offering data on plan coverage, perfor-



THE HEALTHCARE SYSTEM HAS ENTERED THE THROES OF A MOMENTOUS POWER SHIFT—FROM EMPLOYERS DEMANDING REDUCED COSTS TO CONSUMERS SEEKING CONTROL OF COSTS, ACCESS, AND QUALITY.

mance ratings, and physician and consumer satisfaction surveys to satisfy consumer thirst for information. And independent industry groups are developing broad-based measures, a leading example being the Health Plan Employer Data and Information Set (HEDIS), an initiative of the National Committee for Quality Assurance (NCQA) in Washington, D.C. (www.ncqa.org).

But the complexity of that sort of data poses a decided challenge. "The fundamental things we in the healthcare industry need to give consumers are just not available yet," says Cynthia Burghard, research director at GartnerGroup, a leading provider of technology advisory services in Boston. "We barely have enough information to understand how to measure quality, much less to report how this data should be used by consumers to make informed healthcare decisions."

I.T. to the Rescue

How do healthcare organizations hope to conquer the data complexity issue? Many are relying on information technology (I.T.) to find solutions. For example, software developers at XyberNET, Inc., developer of a computerized benefits enrollment system, headquartered in San Diego, offers the HealthFare system to simplify benefits administration for health plans and employers, while giving consumers immediate access to information about health plan options and then allow-

ing them to self-enroll. Estimates reveal this technology can cut the cost of a single health plan enrollment from \$4.75 to under \$1.00 per employee.

"But there's more to the system than administrative savings," says Eric Peterson, XyberNET vice-president and general manager. He explains: "Health plans that use this technology will undoubtedly have a competitive edge in the marketplace. Because employers are now asking for these systems as a regular condition of doing business, many may just change health plans for the one with the electronic link."

And with an estimated 30 million Americans now linked to the World Wide Web, more healthcare organizations are putting great trust in the Internet to serve as a conduit of information and to harness its power to effect change. At least 29% of HMOs surveyed in a 1997 Gartner-Group study reported using the Internet to communicate with business partners and/or consumers. Of those, 77% have developed corporate home pages and another 18% report using the Web to market their services. Some industry observers think the Internet will become the standardized network for sharing information transactions and analyses.

Even the federal government is

using the Internet to disseminate healthcare information. For example, the Health Care Financing Administration (HCFA) maintains a website (www.medicare.gov) to help Medicare recipients better understand new choices in Medicare Part C. The site has been exclusively designed for seniors, allowing them to compare premiums and covered services of Medicare+Choice plans by state, county, or zip code.

The Employers' Managed Health Care Association (MHCA) in Washington, D.C., an association of more than 100 employers working to foster a better healthcare delivery system through managed care, has been instrumental in such efforts. Last May, MHCA cosponsored a Medicare summit with HCFA's Center for Beneficiary Services, which focused, in part, on how to introduce and explain new concepts to Medicare beneficiaries. Pamela Kalen, MHCA executive director, believes initiatives such as these will become more popular as the healthcare industry takes greater advantage of I.T. solutions such as the Internet. "For the employer community," says Kalen, "the advent of I.T. is making the difference between offering value-based information about health plans and just providing cost-related information."

Despite innovative initiatives, there are still many industry barriers impeding successful integration and dissemination of healthcare information. "Most of today's initiatives are 'infomercial-like,' only scratching the surface of what consumers really need," says Burghard. "These efforts help health plans distribute marketing and basic health education information to consumers. But they will not have an effect on healthcare delivery, unless either such efforts are personalized to specific consumers or they drive consumers to actively participate in their care."

Internet-based solutions also fail to consider types of consumers—the working poor, the illiterate, and the computer illiterate, for example—who either don't have access to the Internet, don't understand it, or opt not to use it. Those groups will be left out of the information exchange.

Strategic, Financial, and Clinical Benefits

The I.T. industry faces other challenges. This year, NCQA had planned to ask health plans to refine their I.T. systems as part of its push for developing more sophisticated information. This request, however, was halted in consideration of the plans need to be Year 2000-compliant. Otherwise, according to the NCQA, the potential pressure to upgrade their I.T. systems would have literally caused an information overload.

This story points out that I.T.

JUST WHO ARE THE NEW HEALTHCARE CONSUMERS?

Consumers are not just the patients who have already entered the healthcare system. They may be healthy individuals who find themselves paying a higher proportion of their health insurance costs. They might be caregivers responsible for the health and financial well-being of loved ones—aging parents, in the case of many baby boomers. And consumers increasingly are the baby boomers, who as they age would heavily tax any healthcare system. One estimate suggests that if present trends continue, healthcare costs for the elderly portion of the American population could consume 10% of the gross domestic product by 2020. That's more than twice the share in 1995, leaving Americans with less money to spend on other goods and services.





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SHOW ME THE DOCTOR!

One example of information helping to drive market change is the Consumer Choice System used by HealthPartners, a not-for-profit parent group of several health plans, clinics, and hospitals in Minnesota. "For decades, the healthcare industry has asked consumers to make more decisions about their healthcare, but up until now it has not offered easy access or provided the right type of information necessary to make informed choices," says George Halvorson, president and CEO of HealthPartners, based in Minneapolis. "Our interactive computer program helps consumers and the public make decisions by giving them information about their physicians and/or clinics through consumer performance measures and outcomes about patient care."

The database includes information on more than 7,000 physicians, 1,900 clinics, and 95 hospitals, permitting users to review physician credentials and read each doctor's personal statement and philosophy about medical care. (It also includes a photo of the physician.) The system also enables consumers to compare their provider's performance to nationally recognized medical standards, such as screening rates for childhood immunization and cervical cancer. (See www.healthpartners.com).



applications are by no means limited to communicating with a growing class of consumers. Indeed, much of the I.T. activity within healthcare systems is tied to internal missions, such as streamlining administrative processes and scheduling. Developing comprehensive and secure electronic medical records is another key objective, and planning for the turn of the millennium has many I.T. specialists working overtime. Furthermore, healthcare organizations are looking to I.T. to address fundamental medical matters such as helping physicians make diagnostic and treatment decisions, providing patient education material to targeted groups of individuals, and tracking patients' compliance with prescription medications. In other words, savvy CIOs are looking to prove I.T.'s relevance for strategic, financial, and clinical applications.

G2R, Inc., an I.T. market research and consulting firm in Mountain View, California, reports that healthcare organizations spent more than \$15.6 billion on I.T. products last year, with spending expected to exceed \$20 billion by 2001. I.T. companies continue to debut innovative products to aggressively meet the needs of their customers.

For example, one of the biggest issues facing healthcare organizations is the need to integrate existing computer systems, a need compounded by the recent frenzy of mergers and acquisitions. Enter Microsoft Corporation's ActiveX for Healthcare, a set of software standards designed to provide "plug-and-play" interoperability so that healthcare organizations can select best-of-breed components from any source. As a company increasing its commitment to healthcare, Data General Corporation, a major supplier of storage and enterprise

HEALTHCARE ORGANIZATIONS SPENT MORE THAN \$15.6 BILLION ON I.T. PRODUCTS LAST YEAR, WITH SPENDING EXPECTED TO EXCEED \$20 BILLION BY 2001.

server solutions based in Westboro, Massachusetts, has formed an alliance with Microsoft to promote ActiveX applications.

With more than 1,200 hospitals using Data General systems, the company certainly has found satisfied customers. Says Dick Escue, CIO for Baptist Memorial Hospital Health System in Memphis, Tennessee, "ActiveX appears to have substantial value to an integrated delivery system. Achieving plug-and-play interoperability at the application level with diverse applications across our enterprise is a highly desirable goal." Perhaps it's no surprise that healthcare now represents Data General's largest vertical market.

Data General also offers its Picture Archiving Communications System (PACS) solution, based on the latest technology for digitizing x-rays and other medical images. PACS is a filmless imaging system that processes, reports, reads, archives, and stores images. According to Afzal Ahmed, MD, chair of medical imaging at Princeton Community Hospital, an acute-care facility based in southern West Virginia, the solution will make Princeton more efficient in providing quality healthcare.

"Swapping x-rays for images will dramatically reduce the chances of losing or misplacing x-ray images due to human error," he says. "We will be able to distribute electronic images simultaneously from multiple locations, transmit images between departments and remote or satellite facilities with a single keystroke, and control our storage space requirements."

Seamless exchange of electronic information is a virtual battle cry for the healthcare I.T. industry. As Jeffrey Karp, director, healthcare industry, at

Sybase, Inc., a world leader in distributed computing architecture in Emeryville, Cal-

ifornia, succinctly puts it: "Healthcare is a distributed process, which assumes the need for a network. Any clinician is better served by context." Karp points to a Sybase installation in the far-flung reaches of Canada as a compelling example. Sybase assisted the government of the Northwest Territories in developing a computerized healthcare record-keeping and management system to span the widely scattered population, while adapting to different service delivery models.

EDS, a leader in the global information services industry, is pushing the logistical limitations of healthcare delivery. EDS, based in Plano, Texas, has partnered with Health Hero Network, Inc., of Mountain View, California, to implement the latter's HealthBuddy Service, a two-way communication service that enables healthcare organizations to have frequent meaningful contact with patients. Timely, personalized communication provides more opportunities to identify potential serious situations sooner, allowing providers to focus additional attention on those patients who need it the most. Patients communicate via the HealthBuddy appliance, a low-cost device that plugs into an existing telephone jack and enables daily interaction via simple queries, educational information, and reminders. The device also transmits updates on key measures such as blood glucose levels from the privacy of patients' homes. Healthcare organizations pay a monthly per-patient fee that is less than the typical cost of a single completed call made to the patient by a care manager.

"The current acute care focus of our healthcare system tends to address the needs of the chronically ill after

FOR THE EMPLOYER COMMUNITY, THE ADVENT OF I.T. IS MAKING THE DIFFERENCE BETWEEN OFFERING VALUE-BASED INFORMATION ABOUT HEALTH PLANS AND JUST PROVIDING COST-RELATED INFORMATION.

they become critical," say Rob Beardall, MD, EDS medical director. "Combining the core competencies of Health Hero Network and EDS creates a solution that shifts this model to one of proactive intervention prior to the occurrence of a crisis."

EDS also is addressing the access-to-care issue for another challenging group of patients: Medicaid recipients. The company provided the automated claims verification system that helped win the Arkansas Department of Human Services a Ford Foundation grant as "Top Ten" Innovation in American Government for 1997. Since the model program called ConnectCare was implemented, the pool of doctors in the state who are willing to treat Medicaid patients has swelled 1,600 and emergency room use by Medicaid patients has fallen 10% below that of the general population. A 1995 study concluded that the program had saved \$30 million over its initial 17-month period. Physicians used to decline Medicaid patients because they were unwilling to take on the paperwork and reimbursement delays. But a new magnetic "swipe" card allows claims to be automatically processed in 20 seconds, verifying eligibility and benefit status and depositing payments directly into providers' bank accounts.

Physicians Take Command?

Sometimes, though, physicians are caught between what their judgment dictates and what employers say. I.T. promises to also address that gap, fostering clinical decision-making within a context of facts. For example, InterQual, a Woburn, Massachusetts, firm developed Clinical Decision Support Criteria to provide patient-specific information to assist physicians in making admissions and discharge decisions. This year, Princeps,

a radiology management service organization with 135,000 privately insured lives in Alabama, expects to save about \$1.8 million by using InterQual's criteria.

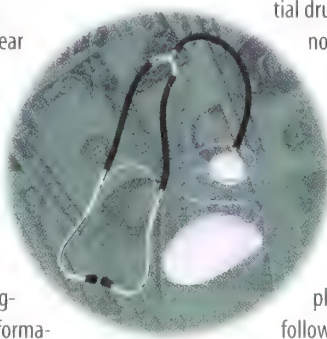
And earlier this year Sybase nominated Disease Manager Plus, a medical information database system that relies heavily on Sybase software tools, for recognition as a 1998 Information Technology Innovator by *Computerworld* magazine and the Smithsonian Institution. The system, developed by MIQS, Inc., in Golden, Colorado, transforms medical records into an analytical tool for optimizing the care of renal patients. In installations to date, it has enabled clinicians to treat 42% more patients, reduce hospitalizations by more than 25%, and achieve a mortality rate nearly 25% below the U.S. average in the treatment of chronically ill patients. The premise of Disease Manager Plus is to help clinicians track and analyze—using statistical models—any combination of signs, symptoms, diagnoses, medications, and laboratory tests.

Then again, physicians may balk at technological cues, because they often are based on heavily standardized approaches to diagnosis and treatment. From a survey conducted last summer, United HealthCare, a leading managed care organization in Minneapolis, learned that in spite of the availability of clinical guidelines, many physicians did not use them. The doctors might argue that they wish to reserve the right to treat their patients their

way. However, the study of 1,600 cardiologists and internists in four states suggested that physicians routinely failed to prescribe essential drugs and order diagnostic tests for conditions ranging from heart disease to diabetes. The survey also pointed to the need for national standards that all physicians should follow when treating certain illnesses, and it indicated that medical technology might be developing too fast for many physicians to keep up-to-date.

Many physicians would dispute those conclusions. Tired of practicing medicine through what they perceive as "bean counters," some physicians have responded by instituting their own marketplace change. Last year, for example, 600 physicians from the Harvard Vanguard Medical Associates, a nonprofit multispecialty group practice with offices in greater Boston, left the Harvard Pilgrim Health Plan to establish themselves as a separate medical group, to help enhance and create a role for the physicians in the governance of the delivery of care.

In some markets, employers are starting to look exclusively to physicians to provide and manage health care, questioning the actual value of using an intermediary—such as an HMO—to deliver healthcare services. "Employers want to know why they may be paying for public relations, marketing, and claims administration, when those functions add virtually nothing to the delivery of health services," says Blaine Boss, principal



at William M. Mercer, a benefits consulting firm in Chicago.

While this movement is still in its infancy in urban markets, it has been used for some time in rural markets. Boss believes that within the next decade, employers will more likely go directly to healthcare professionals to establish partnerships aimed at improving employee health.

Winning the Revolution

Whatever may be next for the healthcare revolution, one conclusion already seems clear: All interested parties—employers, consumers, and providers—must learn to harness I.T. on behalf of the mutual goals of high-quality care, widespread access to care, and cost-effective prices. Only with the aid of electronic tools is it likely that the revolution can be won. ■

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The profit outlook is bleak, and households will feel the backlash

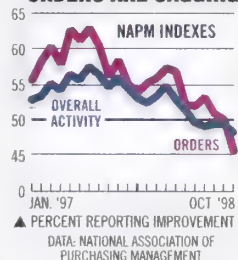
U.S. ECONOMY The world is breathing a little easier. Asia's hemorrhaging has stopped, and the financial firewall around Brazil seems to be holding. The Federal Reserve and other central banks are cutting interest rates, bringing cheer to stock markets, especially in the U.S. And now comes word that during the global economy's summer from hell, the seemingly unflappable U.S. economy grew a solid 3.3% and a continued acceleration in workers' pay and benefits. So we must be out of the woods, right? Don't bet on it. Nothing could spell out the coming slowdown in the U.S. more clearly than the third-quarter reports on gross domestic product and employment costs, along with the October update from the nation's purchasing managers. The data highlight an ongoing reversal of fortunes between Corporate America and Household America: Amid tight labor markets and weak pricing power, profits are suffering even in a strong economy. But for households, the side of rising labor costs and weak pricing is fatter checks and more buying power.

ated in September and October." Growth over the summer was boosted by inventories, which grew by \$57.2 billion, up from \$38.2 billion in the second quarter. But much of that reflected renewed stock building of cars after a strike crippled output at General Motors Corp. That plus for growth is not being repeated in the fourth quarter.

Domestic spending, however, slowed from its torrid 6.7% growth rate in the first half to 3% last quarter. And that slowdown could be traced to the divergence between households and businesses: Consumer spending, up 3.9%, continued to provide a key support for the quarter's overall growth, while capital spending fell 1% last quarter, the first decline since the 1990-91 recession.

Business investment was dragged down by a drop in construction activity, but outlays for equipment barely rose last quarter. A GM strike-related plunge in spending for transportation equipment helped to pull down the third-quarter total, but even excluding that sector, outlays have slowed this year. Quarterly spending growth in all equipment categories was below their average gains during the previous year.

PURCHASERS SAY ORDERS ARE SAGGING



WHY THE SLOWDOWN? Flagging profits play a big role: Companies aren't generating enough cash to justify further increases in capital budgets. And tighter credit conditions mean companies can't easily finance purchases.

In addition, businesses don't need to add to their production capacity when weak foreign demand is cutting overall orders and output. The GDP report showed that exports last quarter fell for the third quarter in a row, even as slower U.S. demand reined in import growth a bit. The trade gap widened further, although by less than in the first half.

That softness in demand, both from abroad and at home, is clearing out order books and cutting into factory production. The nation's purchasing managers' index of industrial activity fell to 48.3% in October, the lowest level in two and a half years and below the 50% mark, indicating that U.S. manufacturing is in a recession (chart). Orders were a big drag, especially export orders. That

ANATOMY OF A SLOWDOWN

1998 GROWTH RATES
PERCENT, ANNUAL RATES

	1ST HALF	3RD QTR.
GDP	3.7%	3.3%
ESTIC (Q4)	6.7	3.0
SUMER DING	6.1	3.9
VESS TMENT	17.4	-1.0
ING	15.3	6.8
RNMENT	0.9	1.4
ITORY	\$64.8	\$57.2
TH*		
XPOTS*	-\$221.8	-\$262.5

\$ OF 1992 DOLLARS
DATA: COMMERCE DEPT., BUSINESS WEEK

to embolden the Fed's hawks, who only four months had voiced dissent over not raising interest rates to inflation risks in '99. But at the same time, increased global uncertainty requires the Fed to keep down to assure that credit flows smoothly through financial markets to corporations, even at a time when bank credit continues to roll freely to households.

1 QUARTER'S GDP REPORT looked strong. But in many demand is slacking off (table). The Fed's own survey of economic activity noted that growth "moder-

index plunged in October to 42%, a record low.

The downshift in demand means that businesses won't be able to boost their profits by increased sales volume. Of course, strong growth hasn't helped them so far. Even though the economy expanded by 3.4% during the past year, profit growth fell to zero. Why? Labor costs are still rising much faster than most companies can mark up prices, and productivity is not growing fast enough to offset that gap.

The third-quarter employment cost index of wages and benefits rose a greater-than-expected 1% from the second quarter, and the pace from a year ago accelerated to 3.7%, the fastest growth in more than six years. Wages, up 4.3%, haven't grown that fast in eight years. And benefits, whose slow growth had been holding back the overall pace of labor costs, are also accelerating now. They were up 2.7%, pushed higher partly by rising medical-care costs (chart).

THE PROBLEM FOR PROFITS: Heading into 1999, labor costs will continue to rise rapidly at a time when investment is slowing, and when slower economic growth is very likely to depress productivity growth. That will leave many companies with only one option—cut payrolls. And when that happens, the consumer juggernaut will finally lose steam.

So far, though, the slowdown has not progressed that far. Indeed, despite having some questions about the

future, households are still basking in the brightness of their current economic conditions. Consumer spending slowed to a 3.9% growth rate last quarter, from 6.1% in the first half, but the slowdown really was not that great. Excluding purchases of cars and trucks to eliminate the ups and downs caused by the GM strike, output rose 5.1% last quarter, only slightly slower than the 5.6% pace in the first half. And in the fourth quarter, sales started off with a bang. Also, housing showed another good gain last quarter, posting a 6.8% increase.

Keep in mind, though, that part of the third quarter's spending spree was financed by households dipping into their savings. In fact, the savings rate was negative in September for the first time since 1933. And in coming months—with the stock market no longer a dependable source for extra cash—households are likely to expect bigger pay raises to finance any buying increases.

However, there is only so much economic pie to go around. At some point, the shift in good fortune from Corporate America to Household America will stop. The latest data suggest that companies may be reaching their breaking point, and households will feel the backlash

LABOR COSTS: GROWTH IS PICKING UP



SOUTH KOREA

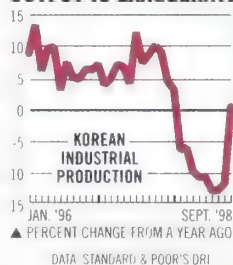
AMID THE CARNAGE, A GLIMMER OF HOPE

South Korea remains mired in its deepest recession since the Korean War. However, the worst may be over, and 1999 looks hopeful. A stronger yen vs. the won makes Korean exports more competitive. Cheaper raw materials, especially oil, are cutting costs. Lower interest rates are easing the credit crunch for debt-ridden companies. And the trade accounts are firmly in surplus, boosting foreign-exchange reserves.

The road to recovery will be tough, though. Feeble demand is decimating profits. And since labor markets remain rigid, surviving companies are coping by slashing capital spending. September machinery orders dove 50.2%

from a year ago, and machinery imports plunged 52.5%. And as 20,000 companies have gone belly up, joblessness has tripled this year, to 8.4% in September, hitting consumer income and confidence.

SEPTEMBER'S BOUNCE IN OUTPUT IS EXAGGERATED



Second-quarter GDP fell 6.6% from a year ago, and third-quarter GDP will fall by even more. Although September data on industrial production and combined wholesale and retail sales looked better, the improvement was due to more working days

compared with a year ago, and October data are likely to weaken again (chart).

A true recovery in 1999 will depend on the pace of reforms aimed at cutting excess capacity, labor

costs, and debt. The government plans to sell or merge three out of every four companies owned by 11 state-run enterprises, but reform has been slow. Nonperforming loans of banks and financial companies remain huge, and corporate debt is high, even as banks continue to lend to nonviable companies. Also, labor market rigidities will be hard to break amid rising joblessness and strikes.

For 1999, stimulative policy will offset some of the negative effect of reform. Public spending is set to provide more support, while a stable won and lower inflation will allow the Bank of Korea to cut rates. Already, three-year corporate bond yields are below 10%, down from 31% at the end of last year. The problem: Short-term stimulus could stall interest in crucial long-term reform.



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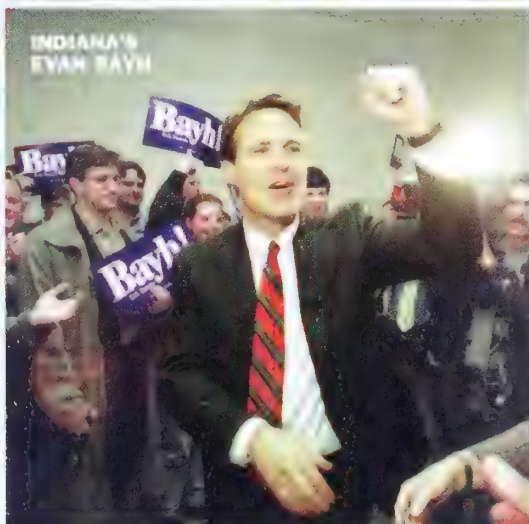
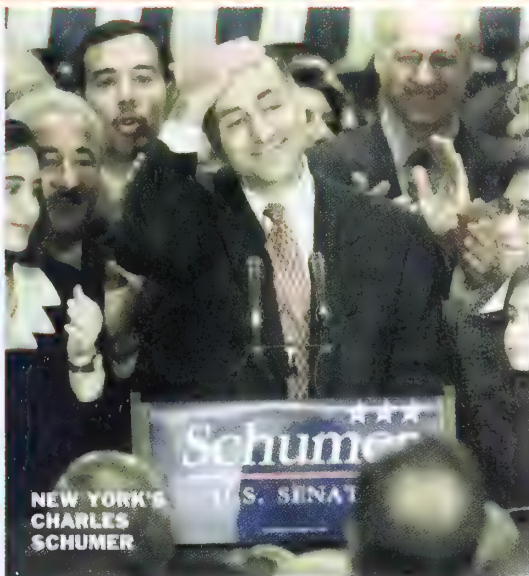


MEMO TO CONGRESS: GET GOING

Voters signal they want pragmatic policies and consensus politics

On Nov. 3, the public sent a signal to Congress and particularly the Republicans: Stop fighting and get back to work on issues voters care about. The message, supported by a surprisingly energized voter turnout that transformed what pundits expected to be a strong conservative Republican tide into a movement back to moderate ground, already home to Bill Clinton and more Clinton-style Democrats.

The reasons for the Republican disappointment were many: massive annoyance with the party's nonstop impeachment inquiry, and a national sigh of contentment with the still-kicking Clinton economy, among the principal ones. By the end of the day, Democrats racked up gains that far exceeded anyone's expectations, adding five seats in the House, leaving the GOP with a margin of 223-to-211. Democrats held the Republicans to a surprising zero net gain in the Senate. Democratic laments over the de-



WINDOW OF OPPORTUNITY

The rebuke of the ideologues gives the centrists a chance to break through partisan gridlock. First, though, there's that matter of impeachment

of freshman Senator Carol Moseley-Braun of Illinois were eased by two triumphs: Representative Charles Schumer's upset of New York Senator Alfonse M. D'Amato and trial lawyer J. Edgar Edwards' ouster of Senator Lauch Curran, an arch-conservative from North Carolina.

California provided extra political news. Lieutenant Governor Gray Davis vaulted to the governorship, giving his party upper hand in redistricting in 2000. Senator Barbara Boxer survived a scare to win reelection—helped in part by support from unions and liberal activists (p. 45). "We were hoping for a wave," says Georgia Representative Max Baucus, chairman of the National Republican Congressional Committee. "They caught it."

The contours of this wave aren't hard to discern. Based on exit polls and the electorate's late tilt toward Democrats, many voters seemed to be saying that

they want Congress to end the flagellation of Clinton, knock off the partisan bickering, and proceed with a loftier agenda for a nation confronted with serious social and economic challenges.

For Democrats, the election demonstrated the potency of their core issues: Social Security reform, more spending on education, and new protections for patients in managed-care health plans.

Come January, party lawmakers and a reinvigorated President Clinton will push an aggressive agenda built around this troika.

Republicans, on the other hand, are too busy pointing fingers over their poor showing to coalesce around any agenda. "Until we start governing with a vision instead with a fear of losing seats, we'll continue to get mauled," moans Representative Joe Scarborough (R-Fla.).

That's not quite the way GOP pragmatists see matters, of course. They contend that party lawmakers need to stop push-

ing hot-button ideological issues and start forging compromises with centrist Democrats. "Voters have just told the House to start building bipartisan coalitions," asserts former Bush White House Chief of Staff Kenneth M. Duberstein. "The message is to get on with it and start performing."

Yet, hard-liners are drawing the opposite lesson. "Conservatives cannot win elections that end up being about nothing," complains Gary L. Bauer, president of the Family Research Council. Rather than cutting deals with Democrats, the Christian right wants conservative members to fight for huge tax cuts, smaller government, and conservative social issues such as school prayer and abortion curbs. "Gridlock," Bauer insists, "is an alternative to surrender."

Which way will Republicans go? If recent history is any guide, in all directions. Take the party's conundrum over entitlement reform. Democrats used the fall campaign to demonstrate the power

ELECTION '98

of Clinton's insistence that a Social Security overhaul precede any bout of GOP tax cutting. Deep down, Republicans want to restructure the retirement system as well, reckoning that it would take away a winning Democratic issue and appeal to Republican desires for at least some privatization.

Senate Republican leaders are willing to work with the Administration on a bipartisan fix, but they want the President to put the first blueprint on the table. While House Speaker Newt Gingrich has adopted Clinton's "save Social Security" rhetoric, most House conservatives distrust Clinton so deeply that they are leery.

The President plans to raise the stakes by pledging a renewed effort to develop a bipartisan reform plan. In December, he will use a meeting of a White House Social Security conference to summon Republicans to the table and will follow up by making reform the centerpiece of his January State of the Union message.

Without a Social Security accord,

NEVER SAY DIE

Despite an overall sense of repudiation, the election was not a total loss for hardline GOP newcomers and incumbents



KENTUCKY'S
JIM
BUNNING



PETER
FITZGERALD
OF ILLINOIS

ELECTION '98

there's no chance that a major GOP tax cut will become law. But Republicans plan to charge ahead, hopeful that a return to a Reagan-style array of big tax reductions will unite their feuding factions. Gingrich envisions a 10-year, trillion-dollar package built around a 10% across-the-board rate reduction.

Other GOP lawmakers are floating tax cuts of as much as \$600 billion. And the

Republican wish-list goes beyond rate cuts: marriage penalty relief, repeal of estate taxes, an end to the Alternative Minimum Tax, another cut in capital gains taxes, and a whole host of new savings incentives. "There is pent-up interest in a significant tax reduction," says Phillip D. Moseley, former chief of staff to the House Ways & Means Committee.

It makes for an ambitious goal, but can the GOP actually pull off such a

NOW THE BANKS HAVE TO GRAPPLE WITH GRAMM

When the securities, insurance, and banking industries ended decades of infighting this fall and agreed on compromise legislation to reshape financial-services laws, they had every reason to think the measure would pass Congress. But they didn't figure on Senator Phil Gramm (R-Tex.) scuttling the bill singlehandedly with a threatened filibuster. His beef: The bill would force banks to increase lending to low-income groups.

Wall Street was steamed at Gramm. But it had better get over it. The free-market ideologue, a tenacious fighter for his personal causes, is in line to chair the Senate Banking Committee. Now that the current chairman, New York Senator Alfonse M. D'Amato, has lost his reelection bid, Gramm will determine whether the industry will ever be able to obtain new ground rules.

The contrast between Gramm and D'Amato will likely be both substantive and stylistic. D'Amato was close to the white-shoe Wall Street investment bankers. Gramm says his preference is for the small-town banker. And while D'Amato was willing to negotiate with Democrats when necessary, Gramm is less likely to do so. Says one investment-bank lobbyist: "Gramm has always been more partisan, and that could be a problem." Gramm, however, is talking compromise on the banking bill. "I believe we need to rewrite those laws," he says.

A PhD economist, he isn't swayed by arguments of special-interest groups—unless they mesh with his own views on fiscal discipline and free markets. And Gramm doesn't mind

a fight. In 1997, he called Securities & Exchange Commission Chairman Arthur Levitt Jr. on the carpet when he thought Levitt was strong-arming the Financial Accounting Standards Board on derivatives-accounting rules.

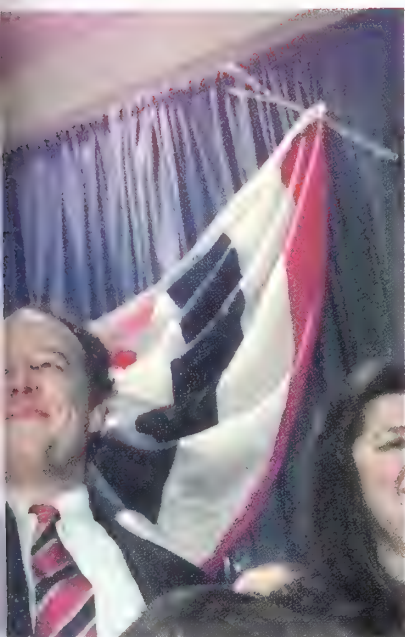
Gramm will imitate D'Amato in one respect: campaign fund-raising. D'Amato used the banking post to raise some \$1.5 million from financial companies for his Senate race. Gramm is

also a champ at filling campaign coffers: He raised \$20 million in a quixotic '96 Presidential bid. No doubt, all sides on the financial-services bill will toss in big dough for his 2002 reelection. Gramm's spokesman denies that was his intent. Still, nice coincidence.

By Paula Dwyer
in Washington



GRAMM: Tenacious



ve tax cut? After all, this year, Republicans couldn't even get a bill on its size through the Senate. Still, Gingrich & Co. vow to push on because they see the '99 tax drive as a no-lose proposition: Either Republicans can take credit for the biggest tax reduction since the Reagan era or they can blame Democrats for denying Americans a boost the pocketbook just as the economy slowing.

ICE BURNED. Republicans plan to play defense on taxes. But on many other issues, the election has thrown the GOP on the defensive. Take health care. This fall, Republicans buried a bipartisan measure to expand the rights of HMO enrollees—and promptly got hammered by Democrats for being tools of the insurance industry. In the new Congress, Republicans will be more inclined to pass a bill, but they'll draw the line at permitting patients to sue over the denial of treatments.

The election could also provide a modicum of tonic for the Administration's stalled free-trade agenda. The influx of a group of pro-trade Democratic moderates, coupled with the departure of a half-dozen protectionist House Republicans, has given business lobbyists a bit more optimism. The Administration plans an early test of the new sentiment by renewing the push to restore the President's fast-track trade negotiating authority. "As the economy contracts, we can underscore the need for new trade legislation to promote our exports," says a Democratic business lobbyist with close ties to the Senate House.

Whether the atmosphere next year is pragmatic or poisonous depends on

LABOR HELPS TURN THE TIDE —THE OLD-FASHIONED WAY

You didn't see much of organized labor during this year's election. Instead of its high-profile barrage of TV ads in 1996, the AFL-CIO mounted a ground war based on an old-fashioned weapon: shoe leather. Across the country, thousands of volunteers pounded the pavement and manned the phones, passing out leaflets and talking to union members at home and on the job.

The result exceeded even labor's most optimistic expectations: While many Republicans sat home, union voters turned out in droves, lifting their share of the electorate to 22% from 14% in the last non-Presidential election in 1994. Labor made the difference in most of the close races where Dems prevailed, including California, New York, Ohio, Wisconsin, North Carolina, and Maryland.

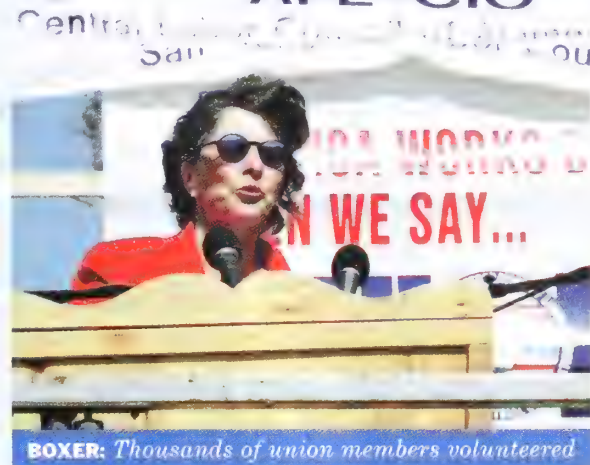
For its efforts, labor stands to reap lots of political gain, since the setback dealt to congressional Republicans will likely distract them from pushing legislation inimical to unions. "They have the money, but we have the people," exults AFL-CIO President John J. Sweeney. **SQUEAKER.** Labor's stealth strategy—training its own members to get out the vote with mailings, phone calls, and worksite visits—worked largely because so many tight races were in places where union members have a big presence. In Nevada, Democrat Harry M. Reid felt he had squeaked by—with a margin of 459 votes—in a Senate race only after a huge effort by the Hotel Employees & Restaurant Employees Union, which represents some 40,000 casino workers in Las Vegas. Volunteers talked face-to-face with about 90% of the state's registered union members.

In California, unions capitalized on

their victory last June against Proposition 226, which would have curbed union political spending. Many of the thousands of volunteers on that campaign turned out again to help struggling Democrats, gubernatorial candidate Gray Davis, and Senator Barbara Boxer.

A big victory came in Washington State, where a referendum indexing the state minimum wage to inflation passed handily. Indexing the national

DAY BRIDGE LABOR DAY AFL-CIO



minimum wage is a longtime goal.

The payoff should last through the next Congress. Deep rifts in the GOP will make it less likely to revive issues labor hates, like changing overtime laws. And Congress' GOP majority, to show they're not deadlocked by the impeachment process, may be willing to compromise, says AFL-CIO Legislative Affairs Director Peggy Taylor. By endorsing 27 victorious GOP House candidates, the union may even have bought some leverage for its agenda on such issues as a patient's bill of rights and a higher minimum wage. "Gingrich will have less of a grip on his moderates, who may now vote with us on things like Social Security reform," says Taylor.

Most vital to Big Labor, its failure to help retake the House in '96 is behind it—thanks to the union army.

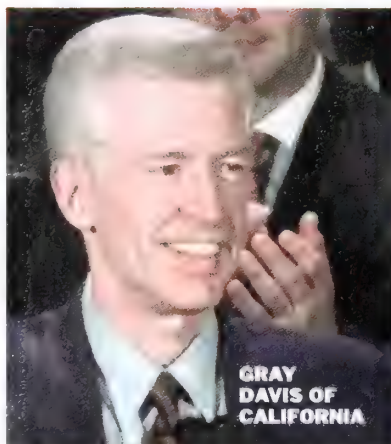
*By Aaron Bernstein
in Washington*

a key bit of unfinished business: finding a way out of the impeachment morass. If Republicans read the election returns the way most independent pollsters do, they'll start negotiating a deal with the White House for some sanction of the President and wrap up their impeachment inquiry by the end of the year. Says Republican consultant Roger Stone: "There is no public support in the country to impeach the President. We should have hearings and then pull the plug."

But will conservatives, furious over the party's inability to convert Clinton's moral shortcomings into traction for GOP candidates, allow their leaders to shut down the impeachment machinery? Amid a hail of morning-after re-creations on Nov. 4, no one could be sure.

NEW POWER EQUATION. This is hardly the scenario American business envisioned four years ago when Republicans stormed to power in Congress for the first time in four decades. Then, there were bright hopes for slashing taxes, expanding trade, and reining in intrusive government. Instead, Corporate America wound up with a dysfunctional Congress that only intermittently kicks to life and delivers anything of value.

By altering the power equation in



BUSINESS BOOST

The election could prove a tonic for Clinton's stalled free-trade push

Washington and delivering a stiff rebuke to ideologues, Election '98 has given centrists of both parties an opportunity to break through the partisan gridlock.

Incoming lawmakers such as Arkansas Democratic Blanche Lambert Lincoln and Ohio Republican George Voinovich, both headed for the Senate, head up a largely pragmatic group of congressional

newcomers. They've pledged to make difference in Washington by pursuing consensus politics. And if anyone pays attention to the voter's message, they may even get the chance.

By Lee Walczak, Richard S. Doherty, and Howard Gleckman, with Elaine Woellert and Amy Borrus in Washington



STATE BALLOTS: ALL OVER THE MAP

Money talks—but only if ballot issues aren't too emotionally charged. That's the lesson from this year's state ballot initiatives.

In California, where two-thirds of all initiative-related spending occurs, voters ignored massive lobbying campaigns by business and approved measures that will swipe cash from Las Vegas casinos and singe Big Tobacco. But voters are less passionate about their electric bills—or maybe less informed. And utilities were able to help induce pocketbook-conscious voters to defeat measures in California and Massachusetts that would have cost the companies billions.

Affirmative action, taxes, and the environment were the big issues that attracted dollars and attention in other state ballot initiatives. In

Washington State, voters—following California's lead—approved a ban on racial or gender preferences in government hiring, contracts, and college admissions. Voters in South Dakota refused to block the use of

ELECTION '98

property taxes to finance schools, Nebraskans rejected a tax-limitation proposal, and a tax credit for children in public or private school was defeated in Colorado. South Dakotans also voted to rein in sprawling hog farms, while voters in Oregon vetoed limits on forest clear-cutting.

VEGAS LOSS. In California, the Indian gaming initiative pitted two well-heeled special interests against each other: California Indian tribes wanted the right to use slot machines at tribal casinos. But Las Vegas casinos, fearing \$700 million in lost annual

revenues, spent some \$30 million to argue against the measure. In the end, the Vegas contingent couldn't shake their image as interlopers from out of state; they lost by nearly 2 to 1.

On Nov. 4, Big Tobacco's \$40 million ad blitz against a 50¢-per-pack tax to fund childhood development programs also seemed to have been ill spent. "It was the tobacco companies. Most people have a gut feeling you can't trust 'em," says former California congressman Michael Huffington.

For electric utilities, however, overwhelming financial firepower for ads, particularly ones pointing out the costs to consumers of the proposed initiatives in California and Massachusetts, did defeat the measures.

By Steven V. Brull in Los Angeles

When traveling,
always make sure to
pack the essentials.



If you have
to do a lot
of traveling
like me, this
makes a pretty
handy carry-on.
It was custom
made for me
by a fellow in
Louisville, Kentucky,
and it holds all the
essentials: a tooth-
brush, nail clippers,

a razor and
of course, the
world's only
handmade bourbon,
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As you can imagine,
I get quite a lot
of comments about
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THE SPEAKER: Facing a daunting number of challenges

POLITICS

FOR NEWT, IT'LL ONLY GET WORSE

Party discontent is putting his leadership at risk—again

At a Nov. 2 pep rally in Roswell, Ga., a throng of Republican loyalists whooped it up as House Speaker Newt Gingrich predicted the GOP would win “very startling victories all over the country.” The next day, the Peach State Republican was startled, all right—but there was nothing to cheer about.

For a leader already struggling to keep his unruly caucus in line, the GOP's stunning loss of five House seats in the Nov. 3 elections was a body blow. With more Democrats and—worse—disgruntled conservative Republicans on his hands, the congressional landscape in 1999 should prove even more treacherous. Already the scapegoat for the GOP's dismal showing, the architect of the Republican Revolution may face a small rebellion of his own—again.

BRUTAL FACTIONS. Although he probably will survive, Gingrich will be weaker than ever. He'll have to contend with brutal factional warfare between a Republican Right still bent on driving Bill Clinton from office, and party moderates who read the '98 election results as a mandate for cutting deals with Democrats. With Republicans holding a tissue-thin six-vote margin in the House, the Speaker will be left with the near-impossible task of delivering on his own agenda—particularly big tax cuts and

slashes in government regulation. “Newt is going to get hammered next year,” predicts Daniel Palazzolo, a University of Richmond political scientist.

Before Gingrich can focus on policy, he has to worry about his own survival. Already, Washington is buzzing with talk of a House leadership shakeup. “It's very real,” says Representative Joe Scarborough (R-Fla.), one of the conservative rebels who backed an abortive coup against the Speaker in July, 1997. But with no one willing to go head-to-head with Gingrich in a power play, and leadership elections only two weeks away, Gingrich has the upper hand. Even Scarborough thinks a second mutiny might be a bad idea, giving voters the sense that the party is indeed in the clutches of extremists: “We've been there, done that. The last thing the Re-

ELECTION '98

JOE SCARBOROUGH:
“The last thing the Republican party needs is the hard right taking control”

than 2002—assuming of course the keeps control in 2000.

But why would anyone want the after the great disappointment of '93? Emboldened Democrats will lure a handful of GOP defectors to policy on education, health-care reform and Social Security. Whoever is Speaker is likely to take heat if he is seen right-wingers, as collaborating with enemy. Already, Gingrich is hearing some bitter cautionary words about holding his ground in battles with moderates and the White House. “If the 106th Congress doesn't immediately pick up conservative family issues, they are going to get worse for them,” Randy Tate, executive director of the Christian Coalition. Of course, to stand his ground and refuse compromise could mean no legislation passing—a loss similar to the one that

Republicans at the polls time.

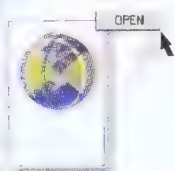
Then there are the Republican moderates, who will insist that it's time to ditch anti-abortion legislation, attitudes on gays, and other hot-button issues. “Dogmatic social policy is not selling in districts across America,” says Representative Mark Foley (R-Fla.). The numbers are not big, but at least according to this election, they mark the way of the future.

Although the election kept Gingrich precariously in power, it surely ended his reign as the leading spokesman for the GOP. With the 2000 race for the White House about to take off, Republicans will be yearning for a winnery rally around. And after the setback of '98, it ain't going to be Newt.

By Amy Borrus, with Lori Woellert, in Washington

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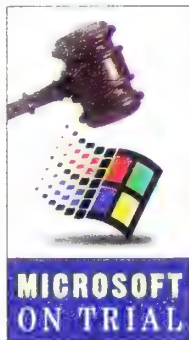
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COMMENTARY

By Susan Garland

NAILING MICROSOFT MEANS PROVING HARM WAS DONE



In a videotaped deposition played in a Washington (D.C.) courtroom on Nov. 2, Microsoft Chief Executive William H. Gates III slouched in his chair and often claimed not to know about subjects on which he had penned entire memos. This was a very uncomfortable day for Microsoft, and there seems little question that the Justice Dept. scored big in its historic antitrust case that charges the software giant with using its operating-system dominance to strongarm companies into distributing its Internet browser. The Gates performance was all the more compelling because it followed three government witnesses who offered powerful tales of nasty tactics. But will showing that Microsoft is a big, bad bully and that Gates is bully-in-chief be enough for the government to win?

Not quite. Proving predatory behavior will be only half the battle. According to many antitrust attorneys, the government also will have to show such conduct actually hurt consumers by stifling meaningful competition and innovation—not an easy task. “Where is the effect on the ultimate consumer?” says New York antitrust attorney Robert A. McTamaney. “No one is representing the constituency that the law is supposed to affect.”

“USER LOYALTY.” That’s the point Microsoft attorney John L. Warden repeatedly made during cross-examination of executives from Netscape Communications Corp. and America Online Inc. Warden argued that while Netscape, Microsoft’s chief browser rival, may be losing market clout, its 40% share means it’s alive and well—

and able to offer consumers a strong product to compete with Microsoft’s.

Warden bolstered his argument in the trial by introducing an internal Netscape document that showed its users rose from 40 million to 65 million in 1997. The paper, written by a Netscape employee, noted “strong user loyalty” to its browser. When shown this exhibit, Netscape Chief Executive Officer James L. Barksdale grouched: “I think this young person is getting carried away.”

And while the government claims that Microsoft’s contracts cut off key distribution channels for Netscape, Warden said consumers could easily find Netscape’s product by download-

that. Antitrust law, which is based mainly on ever-changing court decisions, is murky enough that lawyers disagree over exactly how much harm must be proved. Or for that matter, whether the damage to consumers must have already occurred.

THREAT TO CONSUMERS. Some, like F.M. Scherer, an economist and professor of corporate policy at Harvard University’s John F. Kennedy School of Government, argue that while Microsoft may not yet have injured consumers, the company’s practices do present a long-term threat. “The real issue is not last year’s harm to consumers,” says Scherer. “The issue is one of long-run harm.”



GATES
Did he hurt consumers—or make computing easier for them?

ing it from the Internet or getting it free from the company. “The absence of substantial foreclosure is extremely important,” Warden said. “It is fatal to...every one of the claims asserted in the complaints.”

Warden also made inroads on the pricing issue. He argued that consumers benefit from having more functions packed into the Windows operating system at no increase in cost. Says Carl B. Shapiro, economics professor at the University of California at Berkeley: “Consumer harm is tangible when you can show jacked-up prices. It is harder to prove in this case. If you set the bar as, ‘Can Justice show consumer harm in the here and now?’, that is very difficult.”

Of course, it’s not as clear-cut as

But proving a hypothetical may pose just as great a challenge for Justice. The government hopes to make its case on future harm when two economists testify on the idiosyncrasies of the high-tech industry. They will argue that the demise of Netscape’s browser business is inevitable. For one thing, the government argues, with Microsoft’s Internet Explorer bundled into the operating system, computer makers have little incentive to offer alternatives—and consumers have little reason to bother downloading Netscape. “Most people take the path of least resistance,” says Lou Mazzeuchelli, a technology analyst with Gerard Klauer Mattison & Co. in New York. “Is it too late to level the

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playing field? I like to hope not."

The economists may argue that while Microsoft prices may be dropping, they're not dropping as fast as those on software products made by some other companies—and certainly display nothing like the deflation affecting computer hardware. Netscape can't sustain free browsers forever. Once browser competition disappears, the argument goes, Microsoft can extend its control over Internet commerce—a scenario in which a single company may have too much power for the public good.

"A LITTLE RISKY." For now, though, these are all ifs. William E. Kovacic, visiting antitrust professor at George Washington University, says Justice may have erred when it pulled a Boeing Co. executive from its witness list. "It's a little risky to tell the court that you can infer from the brutishness of conduct that there was anticompetitive effect," Kovacic says. "It's much more effective to have the users step into court and say, 'We suffered.'"

Testimony from one of Justice's own witnesses shows just how hard it will be to prove harm. During Warden's cross-examination of David M. Colburn, AOL's senior vice-president for business development, Warden asked if Microsoft's "decision to develop improved versions" of browser technologies had been bad for AOL subscribers. "No," Colburn replied. Warden then asked, "Has Microsoft's decision to make Internet Explorer available to AOL free of charge been bad for AOL subscribers?" Again, "No."

That's not a winning admission for prosecutors. With its case still young, Justice has time to try to prove Part II. If it doesn't, all the evidence showing bare-knuckled tactics might hurt Microsoft in the marketplace, by emboldening competitors and alienating consumers, but not necessarily in court.

Garland is covering the Microsoft case for Business Week.

BusinessWeek COURT TV

Business Week and Court TV post daily updates at www.businessweek.com and www.courtstv.com. Also, "Microsoft on Trial," airs every Thursday at 7pm E.T. on Court TV.

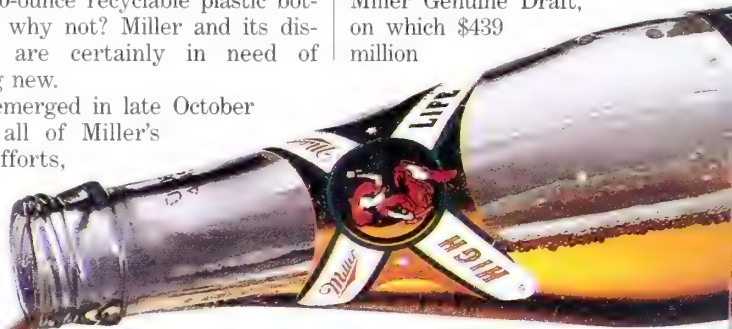
MARKETING

IT'S STILL NOT MILLER TIME

Whatever the brewer tries, sales are going nowhere fast

For years, Miller Brewing Co., the perennial distant No. 2 player of the beer industry, has been a real innovator of everything from breakout products to zany advertising. This month, distributors in six major cities are eagerly awaiting the introduction of beer packaged in 20-ounce recyclable plastic bottles. And why not? Miller and its distributors are certainly in need of something new.

Signs emerged in late October that for all of Miller's valiant efforts, payoff may be



many quarters away. According to parent company Philip Morris Cos., third-quarter sales slipped 4.8% to \$1.1 billion, putting Miller's nine-month total volume at lows not witnessed since 1993, according to newsletter *Beer Marketer's Insights*. Operating profits edged up, but only slightly, to \$118 million, and analyst David J. Adelman of Morgan Stanley Dean Witter expects full-year sales and income to drop 2%, to \$4.1 billion and \$450 million, respectively. The falloff is especially troubling because Miller has been discounting its beer in many markets over the past two years to boost volume. Worse, archrival and No. 1 brewer Anheuser-Busch Cos. seems to be back on track.

AD OVERHAUL. Under increasing pressure from Philip Morris and mounting frustrations among many big distributors, Miller is again trying something new. In meetings on Nov. 4 in Milwaukee with most of its 536 distributors, Miller laid out new marketing

plans and big contract changes designed to upgrade everything from its warehouse refrigeration system to sales executives all the way up to Philip Morris Chairman Geoffrey C. Bible are involved in the planning. Although Miller represents only 4% of its parent's operating income, there have been "lots of discussions" between Miller and Bible, says Chris R. Moore, Miller's vice-president of sales. "He's been highly supportive but obviously demanding." And J. Rooney, Miller's vice-president for marketing, says that Philip Morris "has made clear they expect growth."

On top of the list of changes in works: overhauling the edgy, polarizing ads for core brands Miller Lite and Miller Genuine Draft, on which \$439 million

DRAINING EFFORT

Miller is keeping prices down, aiming for edgier ads, and even experimenting with plastic bottles

has been spent in the past 2½ years. Miller will beef up in-store promotion. The beermaker is also looking for distribution deals; one rumored partner is Heineken USA Inc. And in an effort to broaden its portfolio, so to speak, for distributors, the brewer may even buy smaller brands. One rumor has Miller buying Stroh Brewing Co.'s Colt 45.

All this is about distributor dissatisfaction and increasingly vociferous demands that Miller help them build volume and revenues. But Miller must also come up with ways to increase its cash flow. This summer, the company worked out a deal to produce all other brands of No. 5 player Pabst Brewing Co., an effort to generate money to pour back into core Miller brands.

But of all the concerns of distributors, ineffective advertising still ranks highest. "This is an image-driven business, and we've been missing it for the last several years," complains Barry Andrews, a major Texas distributor. Come up with an answer to that problem, and take all the innovation Miller can handle.

By Richard A. Melcher in Chicago

Digital Muscle



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THE MARKET

SMALLER FRY MAY MAKE THE MARKET SIZZLE

Some pros think small-cap stocks could be the next leaders

It's been three weeks since Federal Reserve Chairman Alan Greenspan graced the stock market with his second rate cut, and investors have been ever so grateful. Greenspan's surprise Oct. 15 move triggered a broad recovery from last summer's bear market that has boosted all but the most badly battered stocks. The Dow Jones Industrial Average jumped 10% through Nov. 4, and the Russell 2000, an index of small-cap stocks, soared 21%.

Those are breathtaking numbers, especially for small caps, which have lagged behind their bigger brethren for the past four years. And as often happens after bear markets, investors are now eyeing the possibility of dramatic changes ahead. During the year ended Oct. 1, just 16 companies accounted for half the 21.9% gain in the Standard & Poor's 500-stock index, says Fidelity Investments. The question now is whether Greenspan has opened the door for a broad-based recovery.

OPTIMISTIC INVESTORS. With the favorable Oct. 30 news of a 3.3% jump in the gross domestic product, and another widely anticipated Fed rate cut that might even come within a matter of weeks, investors are increasingly optimistic about the prospects for the economy. If this scenario holds, investment pros say they expect the market to favor gradually a wider range of stocks than in the past. This could be good news for mutual funds whose performance has lagged the market indexes because of the overwhelming dominance of the "Nifty 50" stocks.

Byron R. Wein, Morgan Stanley Dean Witter's chief investment officer, thinks smaller stocks will sustain their rally through 1999. "Leadership changes take



PROFIT PROSPECTS
Small-cap earnings are expected to leap 31% next year, outpacing the gain for S&P 500 stocks

place after major market corrections," he says. And right now, many investors are favoring smaller, fast-growing companies. "If the economy is good, small- and mid-cap stocks will come through," he says, adding that most small companies are at bargain prices, with valuations at their lowest relative to big stocks since 1990.

Despite the runup, small-cap stocks still greatly lag behind the large-caps. Through Nov. 4, the Russell 2000 index was 18% below its high earlier this year, while the Dow is only 500 points, or 6%, away from its all-time July 17 high of 9338. But small caps' profits, as measured by the stocks in the Russell 2000, are expected to leap 31% next year, far higher than the 19% gain expected for stocks in the S&P 500, says Chuck Hill, research director at First Call Corp.

The profit picture is critical because in recent

weeks earnings have been driving recovery. The strongest stocks are those with the strongest earnings today, the strongest projected profits. Regional banks, biotech, drug, energy, high-tech stocks have all performed recently in large part because they reported the best third-quarter results.

Indeed, many beaten down large stocks have staged robust recoveries

recently because they avoided the blow that decimated so many multinationals this summer. General Electric, Ford, Pfizer, and Lucent Technologies have risen sharply as they have sidestepped problems that beset companies like Gillnet and Citigroup. IBM analysts' estimates for next quarters in a row recently bounced against an all-time high. Dell Computer Co., which slid 75% off its 52-week high, beat analysts' most recent quarterly estimates by 10% and is up 268% from its 52-week low.

Some pros think the stock market going forward may look similar to the last few years, with large stocks remaining dominant. "The biggest difference may be that only the big companies whose earnings remain intact will stay leaders," says John D. Laupheimer, manager of the \$10 billion Massachusetts Investors Trust mutual fund.

But past market corrections have nearly always resulted in dramatic changes in industry leadership. The 1929 crash led to a large-cap surge. The

1980-82 period saw a small-cap surge. The Persian Gulf War opened the door for small caps. And a 1994 Fed rate hike spooked investors back into large caps. The next three years may be too early for any definitive conclusion, but this summer's market will result in a similar shift. But investors continue to move down the hierarchy toward small stocks, that's good for the hundreds of companies that missed the last bull market.

By Geoffrey Smith
Boston

Comeback Kids

S&P 500 COMPANY	STOCK PRICE GAIN FROM 52 WEEK LOW*
DELL COMPUTER	268%
LUCENT TECHNOLOGIES	127
WARNER-LAMBERT	114
CISCO SYSTEMS	99
MCI WORLDCOM	98
WAL-MART STORES	87
SCHERING-PLOUGH	86
MICROSOFT	78
TIME WARNER	66
AMERITECH	65

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DATA: MASSACHUSETTS FINANCIAL SERVICES



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COMMENTARY

By Aaron Bernstein

A STRONG ECONOMY NEEDS STRONG WAGES

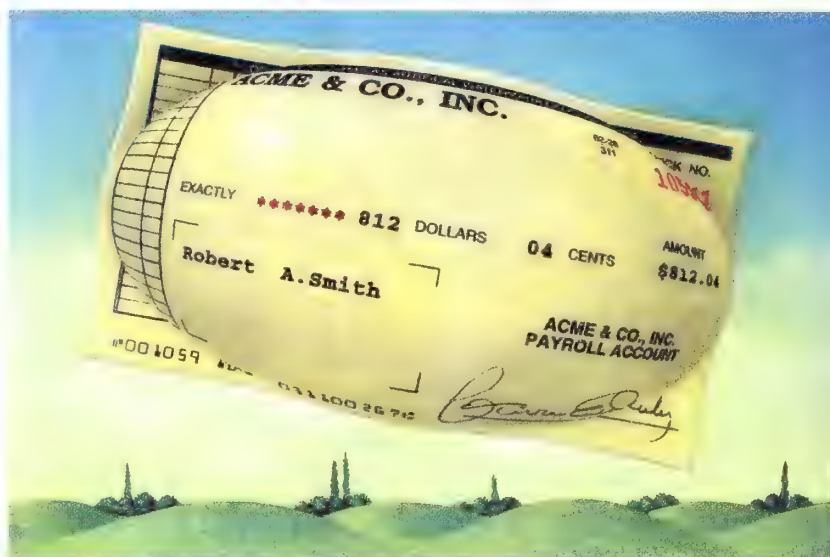
Economists often see fat pay hikes as a danger signal flashing the onset of inflation. But with global economic malaise threatening to engulf the U.S. economy, today's strong wage gains are more likely to help than hurt. The reason: They put money in the pockets of consumers, whose continued spending has been the primary engine of domestic growth.

In fact, the real danger right now may lie with the sharp surge in job cuts that began last summer. If Corporate America overreacts to the global slowdown by slashing payrolls and employees panic, consumers may put away their wallets. "If too many companies cut back because profit growth is slowing, consumers may give up and we'll have a recession," warns David A. Wyss, chief economist at Standard & Poor's DRI.

Certainly, workers have been reaping the benefits of tight labor markets lately. The nationwide scarcity of workers has prompted employers to bid up hourly wages by 2.4%, after inflation, in the 12 months ended in September, according to the Bureau of Labor Statistics (chart). That's nearly double the wage

increase for the same period in 1997, and it's the strongest gain since the early 1980s. However, the trend isn't as inflationary as it seems. Only half of the jump stems from actual pay hikes. The other half simply reflects low increases in consumer prices, which have boosted workers' purchasing power.

NEGATIVE SAVINGS. While employment growth has begun to slow in recent months, nudging up the jobless rate to 4.6%, jobs remain relatively easy to find. In fact, nearly 2 million jobs have been added so far this year, according to the BLS. The result: Americans are flush with cash and are willing to part with it, de-



spite all that's going on overseas and the gyrations of the U.S. stock market. Consumers purchased nearly 5% more, even after adjusting for inflation, in the 12 months ending in September than they did in the same 1997 period, according to the Commerce Dept.

Indeed, families spent more than their incomes in September, nudging the savings rate into the negative for the first time since Commerce started collecting the figures in 1959. Consumers' spending spree contributed the bulk of the growth in the economy during the third quarter, helping to lift gross domestic product by a surprising 3.3%.

With the trade deficit widening rapidly, manufacturing activity slowing for the past five months in a row, and capital spending slackening, the economy would be in a real down-draft were it not for freewheeling consumers.

The key question: Will it continue? While consumer confidence remains high, it has recently started to slip, according to surveys done by the Conference Board. So, too, has the

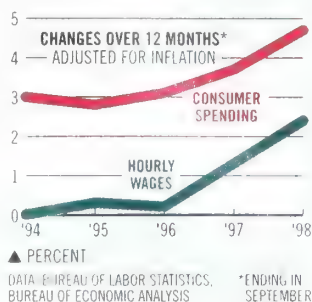
confidence of executives—and far more dramatically. The bleak outlook of CEOs is already being reflected in layoffs. By the end of October, announced job cuts totaled 523,000, up a stunning 60% over last year, according to Challenger, Gray & Christmas Inc., a Chicago outplacement firm.

FLASHING LIGHTS. Of course, it's every executive's job to keep the company competitive and profits growing. But there's also a catch-22: If most employers retrench to boost net income, consumers will stop spending, the economy will nose-dive and no one will make money. "The biggest danger now may be companies cutting back too much," says Nicholas S. Perna, chief economist at Fleet Financial Group Inc.

Perna and other experts think some of the economic negatives may be starting to ease. The global crisis seems to be stabilizing. And the dollar is declining, which should lessen the damage from the trade deficit. As a result, the anticipated slowdown in GDP may not prove bad enough to drag the U.S. economy into recession. But unless consumers keep their wallets open, the flashing lights down the road could quickly turn from yellow to red.

Bernstein covers labor issues for BUSINESS WEEK in Washington.

WILL WAGE GAINS KEEP CONSUMERS SPENDING?



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HOLLYWOOD

THOU SHALT NOT UNDERMARKET

The Prince of Egypt tops a season of deafening hype

All right, it's not parting the Red Sea. But for Hollywood marketers, luring folks to an animated film without being able to use burger chains, toys, or even a theme park ride to promote it can be harder than drag racing on the Santa Monica Freeway. And when the subject matter is God, Moses, and the Bible, you can't exactly license the rights to Burning Bush night-lights or Pharaoh dolls. For DreamWorks skg, that's the challenge of selling its long-awaited *The Prince of Egypt*. Made for anywhere between \$70 million and \$90 million—depending on whom you believe—it's one of the highest-priced gambles in a holiday season packed with films for kids and the family.

In all, Hollywood's major studios will release 25 movies in November and December, says Tom Borys, chief operating officer of box-office tracking company Entertainment Data Inc. Walt Disney Co. alone has four major releases in the two-month period, including its own big-ticket animated film, *A Bug's Life*, a joint production with Steven P. Jobs's Pixar Animation Studios computer animation company. "It's the kind of season where you better have the goods or you're gonna get lost in the dust," says Tom Sherak, chairman of Twentieth Century Fox's film-distribution unit.

GOSPEL BEAT. Of course, sometimes it takes more. The buzz on *The Prince of Egypt*, which features an epic four-minute Red Sea parting, has been strong, but only about a half-dozen Christmas flicks will be true hits. And DreamWorks has resorted to unusual marketing tactics for *Prince's* Dec. 18 release. In the first deal of its kind with a major retailer, Wal-Mart Stores Inc. on Nov. 24 will begin marketing the film with in-store displays at its 2,800-plus discount stores. DreamWorks also took the unheard-of step of releasing three separate soundtracks, including one pegged to gospel and another to country, to increase airplay.

Then there are the usual tactics. DreamWorks intends to spend near-

ly \$30 million to flood the nation with TV and other ads. But DreamWorks' smartest move may have been easing out of the growing logjam of family films starting right before Thanksgiving. That's when Paramount Pictures will release *The Rugrats Movie* with its own \$30 million marketing blitz, including promotional partners such as Burger King, Ford's Lincoln-Mercury Div., Campbell Soup, and Kraft Foods. Also opening around the same time: Disney's *A Bug's Life* and Universal Studios' *Babe: Pig in the City*.

"We're betting that *A Bug's Life* plays right on through the rest of the season, just

like *Toy Story* did three years ago," says Walt Disney Studios Chairman J. Roth. If so, it will run head-on into *The Prince of Egypt* as well as Time Warner Inc.'s *Jack Frost*. The promotional tab for Disney, which also releases *Mighty Joe Young* on Dec. 25, is likely to be steep: Each film will cost upward of \$30 million in advertising just to break through the clutter, industry experts say.

Hollywood is using much of the rest of the holiday offerings to counterprogram. Fox movies include *The Siege*, a Bruce Willis-Denzel Washington action film about terrorists in New York City, to Nov. 19 from mid-November. Disney will open its big-budget Y. Smith film *Enemy of the State* against *Rugrats*, figuring to lure adults. Sony Pictures Entertainment scheduled its Generation Y slasher *I Still Know What You Did Last Summer* two weeks before Thanksgiving while Universal put its controversial remake of *Psycho* a week after the 1 day. Paramount even scheduled its *Star Trek* installment for Dec. 11 to steer clear of congested markets.

The good news for Hollywood is that the box office seems headed for another record. Studio chiefs will tell you that because the films are good. Maybe. But it hasn't hurt that ticket prices are about 50¢ from a \$7.50 base. And Hollywood is taking no chances by slowing changing its marketing. McDonald's feature characters from *A Bug's Life* and Lincoln-Mercury ads feature *Rugrats* in the driver seats—or at least

child-safety seats. DreamWorks' are already appearing on TV shows like *Dateline NBC* and *20/20*. To head off any possible Bible backlash, the studio has met with more than 500 religious leaders to change scenes to accommodate the likes of Jerry Falwell and Pat Robertson. After all, when you're selling the Bible, a little permissiveness doesn't hurt.

By Ronald Grover in Los Angeles, with Wendy Zellner in Do-



A BUG'S LIFE WILL BE RIFE WITH TIE-INS



DREAMWORKS MAY SPEND \$30 MILLION ON ADS FOR THE PRINCE OF EGYPT

Hollywood Dotes on Kiddies' Movies This Christmas

STUDIO	FILM	RELEASE DATE	BUDGET MILLIONS
DISNEY	A BUG'S LIFE	NOV. 25	\$80
	MIGHTY JOE YOUNG	DEC. 25	65
DREAMWORKS	THE PRINCE OF EGYPT	DEC. 18	70
PARAMOUNT	THE RUGRATS MOVIE	NOV. 20	28
UNIVERSAL	BABE: PIG IN THE CITY	NOV. 25	52

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In Business This Week

EDITED BY KELLEY HOLLAND

PEPSI GETS DOWN TO BRASS TACKS

WATCH FOR ANOTHER ROUND in the cola wars. As PepsiCo mulls splitting off its bottling business, it is also revamping its internal operations to focus more effectively on marketing and bottler relations. Philip Marineau, the soft-drink maker's new North American beverage chief, on Nov. 4 named Dawn Hudson to be marketing chief and created a unit under her to focus on creating products. The marketing honcho's job has been vacant since April. Marineau is also forming a group to coordinate, for instance, when Pepsi reps and independent bottlers call on big national restaurant chains. In a memo to employees, he said the

changes will help Pepsi "regain our rightful title as the fastest-growing beverage company." But Coca-Cola, which leads Pepsi in domestic market share by 44% to 31%, already has a similar office.

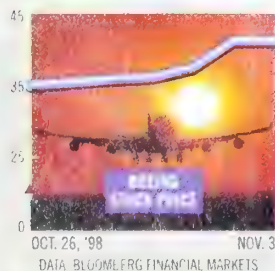
YEP, THE NEIGHBORS HAVE A NEW CAR

DETROIT IS REVVING UP: AUTO sales in October soared 9.8%, pushing the annual selling rate to 16.6 million cars and light trucks. Chrysler, Toyota, Honda, and Volkswagen all enjoyed record sales, and General Motors saw sales rise 6%. Rebates of up to \$3,000, low interest rates, and robust employment are fueling the rise. "Consumers don't appear to be reading consumer-confidence reports," says James P. Holden, Chrysler executive vice-president of sales and marketing.

CLOSING BELL

LIFTOFF?

It has been a while since Boeing's stock has really flown, but shares rose 10% on Nov. 2, to a three-month high of 41%. Boeing produced 51 planes in October, cheering investors worried about production problems. And it has buyers for 10 of the 36 planes it has waiting for financing or new buyers. "I don't think there is more downside to this company," says Prudential Securities analyst Nicholas Heymann. "The question is, how much upside will it have?" He expects the stock to hit 46 in 1999.



STARBUCKS THINKS IT WILL TRAVEL WELL

SALES AT STARBUCKS ARE perking up. Thanks to a new, milder blend of coffees and an improved breakfast food lineup, comparable store sales in October jumped 5% year to year. Now, Starbucks CEO Howard Schultz is trying to expand in Asia, planning to open 500 stores there and in Europe in the next five years. "The Asia opportunity is ultimately as big as the entire company is today," says Christopher Vroom, an analyst at BT Alex. Brown. Starbucks is also working with Kraft Foods to sell Starbucks beans in grocery stores, where 60% of all coffee is sold.

MEDTRONIC GRAFTS AND GROWS

CONSOLIDATION CONTINUES to stitch together the medical-devices industry. On Nov. 2, Medtronic, world

HEADLINER: HERB KELLEHER

SOUTHWEST'S DEEPER NORTHEAST PUSH

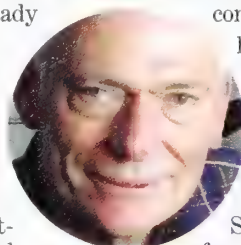
After years of eyeing the nation's top air-travel market, Southwest Airlines CEO Herbert Kelleher may finally be ready to take a bite of the Big Apple. The low-fare giant entered the East Coast market in 1993 with service to Baltimore and later Providence and Manchester, N.H. Now it's in talks to start service to Long Island's MacArthur Airport.

Kelleher won't comment, and Southwest is coy about its plans. "About 160 airports are currently seeking Southwest service, and we are looking at all of them," says a spokesman, adding

that Southwest will announce at least one new destination this year. He confirms MacArthur is a contender. An airport spokeswoman says talks are under way, noting that MacArthur's renovation will make lots of room for Southwest, which favors high-frequency short-haul flights.

Southwest would face stiff competition from bigger rivals and low-cost offshoots such as Delta Express and US Airways' MetroJet. After 27 years of sneaking up on the big boys, Kelleher can hardly expect a warm welcome.

By Wendy Zellner



leader in heart pacemakers, agreed to buy Sofamor-Danek Group for \$3.6 billion. Medtronic's core cardiac business is growing at about 15% a year, while its neurological product sales are up more than 25% a year. Sofamor's \$400 million in estimated 1998 neurological product sales, concentrated in spinal and cranial products, will double Medtronic's, and Medtronic Chairman William George expects the combined company to generate \$1 billion in sales in 1999. "The business is shifting to the market leaders," he says.

FEDEX WARNS OF A BLUE CHRISTMAS

THE RHETORIC BETWEEN FedEx management and its pilots is heating up. After contract talks with the pilots' union broke off on Oct. 30, FedEx CEO Theodore Weise warned that strike threats

on the eve of the peak holiday season have put delivery giant "on the brink of losing several large customers. That, Weise warned, could cost jobs. For the part, union leaders pushed back their target strike date from Nov. 20 to early December. Federal Express is offering a pay hike of 17% over five years. But the pilots want a deal similar to a 24% hike United Parcel Service workers won last year.

ET CETERA...

- Justice indicted developer and Gore pal Franklin Harris on 42 counts of campaign contribution fraud.
- The FDA approved a genetically engineered arthritis medication from Immunex.
- Boston Scientific booked some \$80 million in false sales and "net unrealizable assets."
- Seagram's fiscal first-quarter profit fell 18%, less than expected.

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EUROPE

A CASE OF TOO LITTLE, TOO LATE?

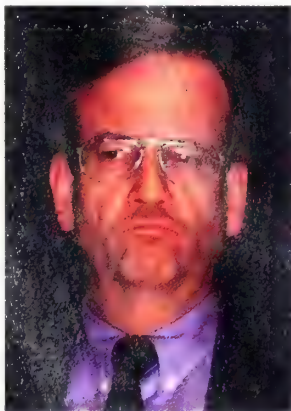
Europe's tech giants are scrambling to get into shape

It was a long-awaited move. In an emergency press conference in Munich on Nov. 4, Heinrich von Pierer, CEO of Germany's Siemens, unveiled a sweeping shakeup of his \$71 billion conglomerate. After years of taking a gradual approach to improving the behemoth's competitiveness in high tech, von Pierer announced that he would apply radical surgery to Siemens, divesting units with sales totaling \$10.2 billion and employing 60,000 people. The company plans to unload its components business and spin off its semiconductor unit. Siemens' stock soared 12% as investors absorbed the news. "We're taking shareholder value more seriously than they had thought," says von Pierer.

Siemens is not alone. Europe's lagging technology titans are finally responding to their impatient shareholders. They are taking action now because they fear that Europe's leftist governments will impose tougher regulations and new restrictions on layoffs. In the past several months, shares of France's Alcatel and Holland's Royal Philips, as well as Siemens, have taken a beating as investors have worried about their ability to keep up with the speed of innovation, particularly in the hot area of wireless communications. In response, Philips has decided to close a third of

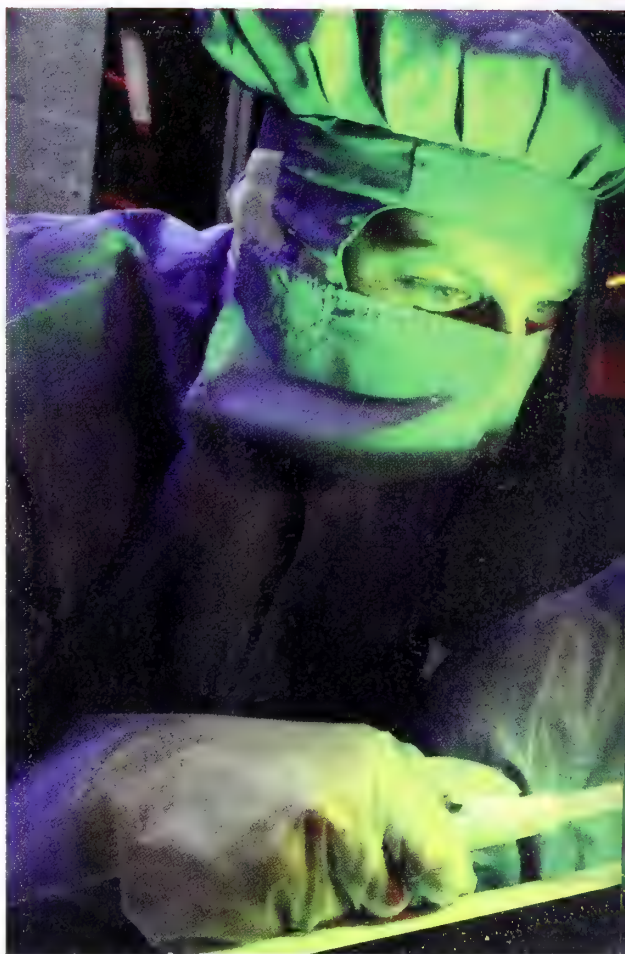
its factories worldwide. And France's Alcatel, after closing 60 plants and spinning off its transport and engineering unit, announced on Nov. 4 that it would undertake a top-to-bottom revamping of its telecom business. Its stock shot up 5%.

Even so, technology watchers worry that Siemens and other European tech conglomerates are changing too little, too late. They are still steeped in a mentality that favors engineering over innovation and marketing, analysts point out. And although their technology is first-rate, they lack the entrepreneurial spark needed to satisfy investors and win in the global information economy. "These companies are dinosaurs in a world now populated by fast-moving mammals," says Kenn D. Walters, managing director of the Munich consultancy Globus. "Now they have to change their very nature."



VON PIERER

Siemens' boss is feeling shareholder pressure



BIG SPIN-OFF

Silicon chip production at Siemens plant in Munich; the unit lost hundreds of millions of dollars amid a global semiconductor slump

machinery for the Internet. They're plowing investments into explosive phone markets and trawling Silicon Valley for acquisitions. And the European CEOs are turning to a new generation of European managers to help run the shakeup. Many have been educated in the U.S. or have worked in American banks or consulting companies. It will be up to them to build an entrepreneurial fire among their ranks.

CHIP SHOT. One key young manager inside Siemens, for example, is 40-year-old Ulrich Schumacher, the youngest board member in Siemens' long history. He will be in charge of taking the company's semiconductor division public. The division lost a stunning \$722 million in the fiscal year ended Sept. 30, amid a global slump in semiconductors. But things are looking up. The market is improving, and analysts say Schumacher



THE BIG SHAKEUP

SIEMENS

The German behemoth plans to divest units with \$10.2 billion in sales, including components and semiconductor businesses. It's shopping for communications companies in the U.S.

ROYAL PHILIPS

Troubled Dutch giant is selling PolyGram and ditching its joint venture in cell phones, but shopping for Internet knowhow.

ALCATEL

After spinning off its engineering unit, the French company is hunting for Net acquisitions in the U.S., its crucial growth market.

DATA. BUSINESS WEEK



may be able to refocus the chip unit, his is potential for a large step forward," says David Richardson, Texas Instruments Inc.'s Europe president. His industry requires autonomy and extremely fast decision-making—which is hard when you're part of an industrial conglomerate." Success by Schuchter could serve as an example for other spin-offs at Siemens and at other high-tech conglomerates.

In addition to unloading its chips and components businesses, Siemens plans deeper cuts. It will sell its telecom business and a small train locomotive unit. And it will spin off or try to find a partner to take on its personal-computer manufacturing unit in a deal with Taiwan's Acer Inc. ended earlier this year.

Even so, analysts are already calling more. "The direction is right. But you have to keep on. This cannot be said," says Frank Rothauge of Sal Oppenheim in Frankfurt. Siemens limped with earnings of just \$552 million in latest fiscal year. Von Pierer is hoping to boost margins by expanding sales efforts in wireless telephony and the Internet.

But Europe's tech giants have languished in this area so far. Philips is a prime example. Only last year, it signed a \$2.5 billion joint venture with Lucent Technologies and barged into the red-hot market for cellular handsets. CEO Cor Boonstra vowed to become a major player in the industry, rivaling Nokia, Ericsson, and Motorola. But while Lucent and Philips boasted stellar technology, their team couldn't ramp up speed for a market that demands new features every several months. In October, Boonstra pulled the plug—at a cost of \$540 million.

SURF CITY. Following a now-familiar script, Boonstra announced new plant closings. From 269 plants worldwide at the beginning of this year, he hopes to be down to 226 by yearend, with an additional 60 to be shuttered over the next four years. At the same time, Boonstra is looking for ways to spend the \$6 billion he's earning from the sale of PolyGram Records Inc. Philips executives say he's eyeing acquisitions in Silicon Valley.

Boonstra's goal, much like Alcatel's, is to build new machines that can link the entire planet to the Web. While Alcatel's

SLIMMING DOWN

A Philips electronics factory in Calcutta; the company is shutting down one-third of its plants over the next four years

devices would be phones with screens, Philips wants to introduce TVs capable of surfing the Web. From a technology point of view, both companies appear well-positioned to build Web-surfing tools. The plan is to supplement their European technology arsenal with a handful of Silicon Valley acquisitions.

Pressured by investors, Europe's tech titans have a newfound willingness to make drastic changes. They've overcome political obstacles to slash away marginal units and cut thousands of workers. Now, all they have to do—no small chore—is to take some chances and learn how to innovate on the run. As their friends in Silicon Valley can attest, those are the true secrets to shareholder return.

By Stephen Baker in London, with Thane Peterson in Munich and Karen Lowry Miller in Frankfurt



BRITAIN

MARKS & SPARKS ISN'T THROWING OFF ANY

A profit plunge throws cold water on the retailer's global push

Aside from British Broadcasting Corp. and the monarchy, there's probably no other institution as much a part of British daily life as Marks & Spencer. The \$13.7 billion retailer sells one out of four men's suits bought in the country. Former Prime Minister Margaret Thatcher buys her underclothes there, along with 40% of British women. Chances are nearly everyone on a British street is wearing something from Marks & Sparks, as it is affectionately nicknamed.

But venerable M&S is coming under fire. On Nov. 3, the retailer stunned investors by announcing a 23% drop in midyear profits. The bad news sent its stock skidding to a three-year low, prompted analysts to slash their full-year earnings estimates, and rocked London's stock market. The earnings slump also casts doubt on M&S's quest to become a global retailer and raises questions about the future of chief executive Sir Richard Greenbury.

SLOW UPTAKE. M&S is suffering from bad timing. It has been hit with poor sales in Britain, North America, Continental Europe, and Asia just as it embarks on the most ambitious expansion push in its 114-year history—adding 3 million square feet of new selling space to its 683 existing stores and opening

new sites. The sales slump partly reflects mistakes in merchandising, inventory control, and pricing. But analysts say M&S was slower to react to a tough environment than many rivals. And flagging economic growth worldwide means things will get even tougher for M&S.

Greenbury passionately defends M&S's performance. He blames a downturn in consumer confidence and a strong pound for most of its woes. But investors and analysts don't buy it. "The majority of M&S's problems have to do with M&S, not with the retail environment," insists Nathan Cockrell, an analyst at BT Alex Brown Inc. in London. M&S shares have underperformed those of other British retailers by 25% over the past year, and its market share has been slipping.

GREENBURY'S CHALLENGES

- ▶ Reduce Marks & Spencer's dependence on the British market
- ▶ Maintain foreign expansion plans as home market turns down
- ▶ Boost stock price, which has fallen 34% this year
- ▶ Clarify succession plans

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PRICES SLASHED!

M&S has discounted some \$1 billion worth of goods

The biggest hit to profit came from M&S's core business: its 289 stores in Britain, where operating profits plunged 24% to \$454 million, for the 12 months ended on Sept. 26. Although the rainy summer hurt clothing sales at many retailers, M&S exacerbated its problems by rolling out a range of dull clothing that didn't tempt buyers. Worse, when it realized it was likely to be stuck with too much stock, it wasn't able to cut back quickly enough on inventory coming from its suppliers, analysts say. Marks has slashed

prices on \$1 billion in goods in an "Autumn Values" campaign, the biggest season sale in its history.

GROWTH HIT. Other British retailers are also running fall sales. But few of M&S's rivals are expanding as fast. Last year the company paid \$321 million in cash to buy 19 stores from Littlewoods, a rival department-store chain. Now, it has slashed its budget for adding nearly a quarter more retail space by 2000 from \$3.7 billion to \$3.2 billion.

Such problems at home could derail M&S's critical global initiative. With 8% of sales and 94% of profits coming from Britain, the company needs to diversify. "Overseas expansion is absolutely crucial to us long-term," says Greenbury. Yet to cut costs, M&S is slowing its aggressive expansion plans on the Continent. It had hoped to have 60 stores in Continental Europe by 2000. Now, it's aiming for 44. Likewise, the company is reviewing the growth plans of its North American stores, which include the revived Brooks Brothers chain and the upscale Kings Super Markets Inc., slowing expansion in Asia.

Amid the missteps, scrutiny of Greenbury has intensified. The 62-year-old executive, who plans to retire in 2001, is under pressure from some instituting investors to name a successor and ditch his roles as chairman and CEO. There's even talk of a boardroom power struggle in which Peter Salsbury, one of three joint managing directors who works for Greenbury, might unseat Deputy Chairman J. Keith Oates as the apparent successor. If sales over the crucial holiday season don't show more spark, Greenbury's 10-year reign at M&S could end ignobly.

By Julia Flynn in London

Paradox:



\$20,495*

It's tough to categorize the 1999 Dodge Intrepid. On the one hand, it has a lease rate that's lean and a price tag that's mid-size. Yet Intrepid offers so much interior space that it's officially recognized as a large car by the EPA. Its standard aluminum engine delivers a stingy EPA estimated mpg of 21 city, 30 highway, yet it generates a stout 100 horsepower. That's more power per liter than any regular-fuel V-6 engine available today. And while Intrepid's ride is supple, its handling is crisp and controlled. Large car, mid-size car, family car, luxury car, sports sedan.

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ASIA

IS THIS RALLY FOR REAL?

Stock markets are jumping, but economic revival is still far off

After more than a year of grim news, the mood in Asia's equity trading pits is finally improving. Buoyed by falling global interest rates, Asia's most devastated market, Jakarta, is up a handsome 58% in U.S. dollar terms since early October, while Seoul is up 40% and Hong Kong, 31%. Even in recession-gripped Japan, the Nikkei stock average has rallied 13%, to around 14,500, amid signs the country is moving to fix its banking mess.

But the recent gains from what Mark Holowesko of the Templeton Worldwide global equity group calls "ridiculous levels" may not signal an Asian economic recovery. Although some overseas fund managers are moving back into the region, most bourses are still trading well below their all-time highs. And many pros are unwilling to concede that this is anything more than a classic bear market rally. "Don't be fooled," says Hong Kong-based hedge fund manager William S. Kaye. "Economies have not bottomed anywhere."

Indeed, just about every Asian econ-

omy is expected to contract this year and next. Reflecting that, earnings are still under pressure, and wages, employment, housing starts, and retail sales are continuing to fall. The cumulative effect, experts predict, is that Asia's stock



markets will continue to bounce along the bottom for at least the next year.

Much of the recent buying across Asia has been concentrated in select blue chips with strong cash flows. In South Korea, for example, four compa-

nies have largely driven much of the market's recent gains: Pohang Iron & Steel (POSCO), Samsung Electronics, Korea Electric Power, and SK Telecom. Across Asia, the revival of the blue chips is a reversal of the situation only a few months back, when investors were selling solid companies along with the dross. But even after their recent gains, many blue chips still trade at far less than their net asset value.

Take Singapore. It is just beginning to feel the brunt of the Asian crisis with its economy contracting by 1% between the second and third quarters. Political unrest in Malaysia and Indonesia is also weighing heavily on Singapore. Yet the Singapore market is up 27.9% in October, partially fueled by the buying of such high-quality companies as Singapore Airlines Ltd. "I don't like Singapore, but I love Singapore Airlines," says Holowesko, who notes the company's market capitalization is 30% less than the liquidation value of the fleet at its low point in August. "It has the best balance sheet of any airline

in the world," he says. "And it's the only airline in the world that can write a check for a new plane," he says.

THIN TRADING. It's not only lower interest rates that are pulling stocks up. Trading volumes on Asian markets remain thin, so even small trades can have a disproportionately large effect. In Hong Kong, where the "free float" number of shares available to the public is only half of the \$240 billion market capitalization, the government took an additional \$15 billion worth of equity out of circulation when it started buying in August to support the crashing market. With the already small float further reduced, prices shot up after the U.S. Federal Reserve started cutting interest rates.

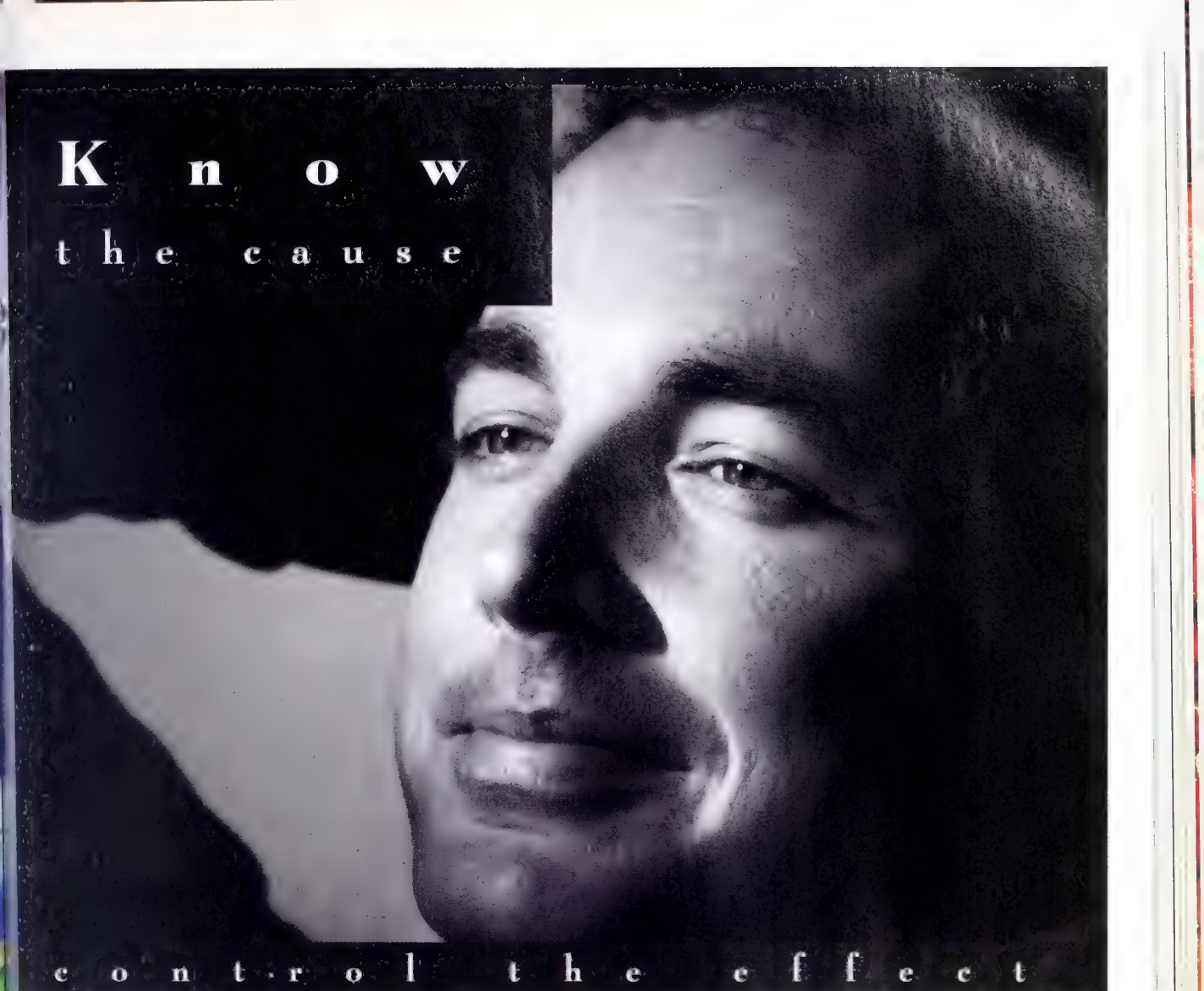
In Japan, the Nikkei gained 4.1% Nov. 4, after Morgan Stanley & Co. global strategist Barton Witter urged clients to increase their exposure to the country. True, price-to-earnings ratios for major listed companies are running at about 74 times estimated

Equities Are a Long Way From Full Recovery

COUNTRY	THREE MONTHS*		YEAR-TO-DATE*	
	LOCAL CURRENCY	U.S. DOLLARS	LOCAL CURRENCY	U.S. DOLLARS
HONG KONG	38.6%	38.7%	2.0%	-1.9%
INDONESIA	-28.4	5.8	-17.7	-48.9
JAPAN	-9.3	12.7	-4.8	6.7
MALAYSIA	11.7	22.1	-27.4	-25.9
PHILIPPINES	13.4	20.8	-8.3	-8.1
SINGAPORE	29.2	37.3	-13.7	-10.8
SOUTH KOREA	24.1	17.3	9.9	34.0
TAIWAN	-9.1	-3.7	-15.7	-15.4
THAILAND	37.2	52.5	-4.9	21.9

*Nov. 4

DATA: BLOOMBERG FINANCIAL MARKETS



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ed 1999 earnings. That's high by international standards. But it's down sharply from recent years and not bad for Japan, where investors have long tolerated high p-e's as huge chunks of stock are locked up in cross-shareholdings between banks and their *keiretsu*, or corporate partners.

Still, even the reduced p-e's could turn out to be no bargain if earnings continue to crater. Profits are expected to fall about 30% in the fiscal year ending in March. Already, some blue chips such as Hitachi Ltd. and Toshiba Corp. have posted first-half losses for the first time since World War II. And a lot of economists see the recession that started in 1997 extending into early 2000 despite government efforts to bail out banks and boost spending. Meanwhile, Japan's cross-shareholdings are unraveling as cash-strapped banks and companies try to cut their losses. That may put enormous pressure on the Nikkei, which some pundits say could fall as low as 10,000 before Japan's decade-long bear market turns a corner.

"FALSE DAWN." Profit prospects in other Asian countries are also open to question. After the big runups of recent weeks, Asian companies with good fundamentals are already hard to find. "There was value six weeks ago, but now, things are beginning to look expensive," says Ian MacFarlane, Paribas Asia Equity's chief emerging-markets strategist. Back in late summer, average price-earnings ratios in Hong Kong, for example, were around 9, compared with 23 in the U.S. Now, Hong Kong p-e's are closer to 16, a level many pros say is too high.

Hong Kong's Sun Hung Kai Properties Ltd. is a clear example. Its shares nearly doubled during October, driving up its p-e from a low in July of 4.8 to 18.2. Is that excessive? "Hong Kong should command a risk premium" because of fears that China may devalue the yuan and that Hong Kong may delink its currency from the dollar, says Eugene K. Galbraith, managing director at ABN-AMRO Asia.

Amid doubts over earnings and economic growth, many big investors remain skeptical despite the recent onrush of foreign buying. They prefer to observe, rather than participate in, the current rally. "This is a bit of a false dawn," maintains Robert Sassoon, research director at SG Asia in Hong Kong. "The fundamentals have not changed." You'd never know it from all the excitement lately.

By Sheri Prasso in Hong Kong, with Mark L. Clifford in Hong Kong, Brian Bremner in Tokyo, and bureau reports

JAPAN

WILL TOYOTA PLAY SUGAR DADDY?

Sakura bank needs a rescue, but the carmaker is balking

It all started way back in 1949, when a little Japanese auto maker called Toyota Motor Corp. almost went broke. Vicious labor disputes crippled the company as it was struggling to pull itself up from the ashes of World War II. Needing cash, the company borrowed \$1.7 million from Teikoku Bank, a Toyota stockholder and the sugar daddy of the Mitsui *keiretsu*. Toyota was saved from oblivion, and Teikoku later became Sakura Bank Ltd.—to this day a major Toyota shareholder and creditor.

Now the shoe's on the other foot. It's Sakura that's struggling, racked by \$5.6 billion in securities losses and carrying \$10 billion in bad loans. It wants to tap Toyota, which holds a 2.4% stake in Sakura, and other Mitsui *keiretsu* members for \$2.6 billion, probably by issuing new shares. To the bank, it appears that Toyota, with \$19 billion in cash, can more than afford to return the favor.

DRAW THE LINE. Sakura's squeeze on Toyota underscores an unpleasant new reality for Japan Inc.: *Keiretsu* ties that once gave Japan's best corporations a competitive edge have now become liabilities. In a string of investments offering minimal returns, Toyota has poured more than \$1 billion into ailing affiliates over the past year or so (table). "If Toyota continues to spend money [from its cash reserves] at this pace, in two or three years it may all be gone," warns Takaki

Nakanishi, an analyst at Merrill Lynch Japan Inc.

Toyota President Hiroshi Okuda trying to draw the line. Rather than having Toyota pony up money to bail out Sakura, Okuda wants the bank to seek help from the government financing Tokyo's new bailout scheme. "We are an auto maker," he says. "We're not a bank." With sluggish sales at home, squeezed margins in the U.S. and evaporating markets in Asia, Japan's No. 1 auto maker needs lots of cash.

Yet although Okuda is talking to Sakura, old habits die hard. Toyota has already propped up nine key suppliers, including Denso Corp. Aisin Seiki Co., by buying their shares—some unloaded by troubled banks. Toyota also tightened its grip on compact-car maker Daihatsu Motor, becoming a majority owner in August.

In another recent move, Toyota lifted its holdings in Chiyoda Fire & Marine Insurance Co. from 37.1% to 47.1%. Using ties to Chiyoda, Toyota hopes to develop a wide variety of insurance policies signed exclusively for Toyota vehicles.

While those investments are at least related, others are more questionable. Take brokerage Kokusai Securities. Toyota upped its holding from 8% to 10% last month at an undisclosed price. And why was the move done? Well, for the sake of an old Japanese practice known as *otsukiai*, or keeping connections.

But in the global auto wars, Toyota needs a sizable cash chest. Okuda is now ready to rule out giving some financial assistance to other companies in the Mitsui *keiretsu*. "But we cannot fail as a result," says. Sounds like Sakura may have to look elsewhere for bailout money.

By Emily Thornton in Tokyo



OKUDA: A big cash hoard

RECENT TOYOTA BUYS

- ▶ Boosts its stake in Chiyoda Fire & Marine Insurance from 37.1% to 47.1%. Price tag: an estimated \$211 million.
- ▶ Raises its interest in compact-car maker Daihatsu Motor from 34.5% to 50.1%. Price tag: \$323 million.
- ▶ Lifts its stake in second-tier brokerage Kokusai Securities from 8% to 10%. Price tag: undisclosed.
- ▶ Increases its holdings in Toyota group companies, including nine auto parts makers. Price tag: \$609 million.

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EDITED BY JOHN TEMPLEMAN

CAN YOUNG BLOOD REVIVE JAPAN'S TIRED POLITICS?

Polls show that Japanese voters are fed up with politics. They have every reason to be. Elders of the ruling Liberal Democratic Party (LDP), gray-haired men in their 60s and 70s, divvy up the political spoils in musty back rooms. Time served and elections won count more than talent. And the real job of governing—deciding on national policies and drafting laws—is left to powerful bureaucrats.

Yet, for all its hidebound ways, Japanese politics are beginning to change. The opposition, led by the center-left Democratic Party of Japan (DPJ), stirred controversy by appointing thirtysomethings as negotiators in recent haggling over financial-reform legislation. The LDP responded by drawing its team from its own ranks of people in their 40s. "For once, we were fully involved in the lawmaking process," says Nobuteru Ishihara, 41, who led the LDP's young contingent during the talks.

Known as the *shinjinrui*, or new breed of politician, Ishihara and his ilk are young, sharp, and cosmopolitan. Although LDP chieftains still called the shots on Japan's \$500 billion bank bailout, the youngsters in the ruling party and DPJ set an important precedent. Without guidance from senior bureaucrats, they drafted bills that laid out plans for financial revitalization.

LOCKOUT. In doing so, they've started to peel away the cozy power-sharing arrangement between the LDP and the central bureaucracy. For years, it has allowed senior officials to rule their sectors as private fiefdoms in return for their approval of pork-barrel projects from bridges to bullet trains. Not only do they script legislation as tightly as a traditional No play, they orchestrate debates in the Diet by feeding questions to LDP legislators along with smooth replies for Cabinet ministers.

The *shinjinrui* attacked the core of this system by locking the mandarins out of the negotiations. "We talked to economists, analysts, and experts, as lawmakers do in the U.S., and

used our own knowhow to write the legislation," says Ishihara, who covered the economy as a TV journalist.

Now, the LDP upstarts are shocking their elders by advocating for abandonment of its seniority system and appointment of younger Diet members to key posts. "The LDP needs leaders who understand the New Economy and who can take risks," says Ishihara. Although a centrist himself, he is the son of former Transport Minister Shintaro Ishihara, a right-winger who urged Japan to stand up to the U.S. in the



ISHIHARA: LDP negotiator

best-seller, *The Japan That Can Say No*.

FIREBRANDS. Oddly enough, many of the LDP's new generation—including Yasuhisa Shiozaki, 47, a former Bank of Japan official, and Yoshiaki Watanabe, 46, another second-generation politician like Ishihara—appear to have much in common with the opposition DPJ. Its leader, Naoto Kan, 52, is recruiting young professionals to the DPJ—and urging the LDP to promote its own *shinjinrui*. "The LDP will have little choice," he says, "but to put [their youth] in the front line if they hope to fight us."

Right now, the ruling party's firebrands are intent on heading off another LDP election loss. In October, Ichita Yamamoto, 39, launched a new group to study Kan's policies and tactics and their possible uses for the LDP. "With the economy in decline and our support base declining, we stand to lose the next election,"

Yamamoto warns.

A general election, which many are predicting for next year, might finally revive Japan's apathetic voters, who elected the LDP from power in 1993 and may be ready to change again. Such a turnover, observes DPJ deputy policy director Yukio Edano, a 34-year-old lawyer, "would pave the way for a change from the old to a new generation of rulers." And that would mean that the *shinjinrui* has arrived for good.

By Irene M. Kunii in Tokyo

GLOBAL WRAPUP

MOSCOW BETS ON A LOTTERY

► With tax receipts crimped by Russia's economic crisis, Moscow is turning to a recession-proof source of revenue: gambling. The city has hired Taipei's Goyoung Information Services Corp. to operate the country's first officially sponsored lottery, a Powerball-style jackpot game. Goyoung, which runs lotteries in Taiwan and Hong Kong, will install 500 terminals, in shops and elsewhere, where Muscovites can place bets for about \$1. The city will get 10% of the

expected gross of \$100 million a year and will use the money for social services. Lotteries flourish in hard times, Goyoung says, because people are more willing to bet on a windfall. An estimated 65 million Russians gamble in private, mostly illegal lotteries.

OTTAWA RECASTS A TRADE FEUD

► Canada and the U.S. are heading into another fight over publishing protectionism. To discourage Canadian editions of U.S.-owned magazines, Ottawa plans to levy stiff fines on foreign publishers who accept Canadian

ads in such editions. The reason: cultural self-preservation. Ottawa fears that Canadian editions of U.S. publications such as *Glamour* and *Good Housekeeping* would steal ads from Canada's own *Flare* and *Canadian Living* and kill them off.

The U.S. won a World Trade Organization case against Canadian magazine barriers last year. Now, Canada hopes to skirt free-trade rules by treating publishing as a "service." But the U.S. threatens reprisals against hundreds of millions of dollars of Canadian exports if Canada passes a new bill imposing the fines.



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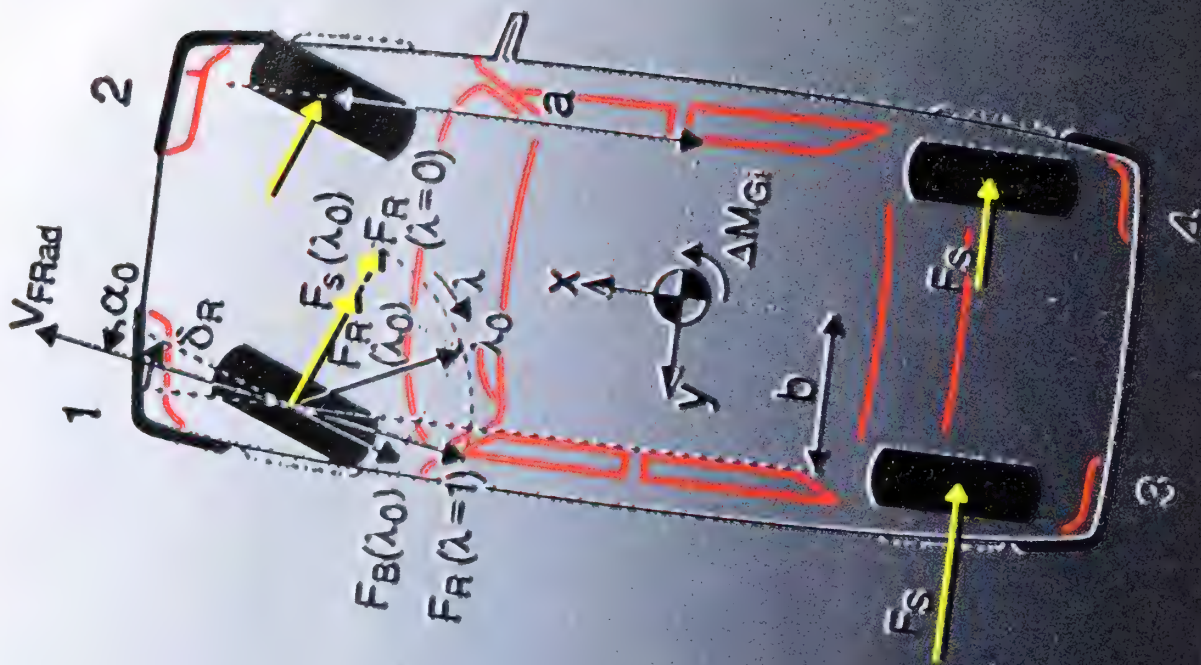
Sometimes you need a little lateral thinking to be ahead of the
challenge of the unpredictable. If you expect a different kind of
everything we do we want to be not just any bank, but the right

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**Take a wet hairpin
turn going too fast
and this diagram
suddenly makes
a lot of sense.**

What may look like a confusing diagram is actually a formula for a safer car. It describes, in technical terms, the Bosch Electronic Stability Program (ESP), a safety system. ESP allows cars to better follow their intended line of travel even on wet or icy pavement. Which means more control and less sliding in severe conditions. Here's how it works. As soon as an apparent slide is detected by the system, the ESP generates a counteracting movement by intervening with the brakes, the engine and the transmission. So the driver keeps better control of the car. ESP from Bosch is another example of how we help make vehicles safer, no matter how complicated it looks.

We bring innovation



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SMOKE ALARMS AT RJR

Winding profits make a tobacco settlement more urgent than ever

Steven F. Goldstone has been a busy guy. As head of RJR Nabisco Holdings Corp., he has spent the past year jetting from city to city as the tobacco industry's point man in a frantic effort to reshape the most villainous business in America. Penitent, he knitted before Congress that his product is addictive. Then, defiant, he led a successful drive to kill federal legislation that would force the industry to pay billions of dollars more than it had agreed to in settlement talks with the attorneys general. Throughout, Goldstone has been front and center in what he describes as a "public-policy debate on the issues that affect our industries and customers."

Only problem is, while CEO Goldstone works tirelessly to separate Big Tobacco from its quagmire, his company is being eaten alive on the operating front. At home, industry giant Philip Morris is kicking No. 2 RJR's cigarette butts with its Marlboro brand, out-marketing and out-spending its smaller rival to steal almost a full percentage point of U.S. market share so far this year. Things are even worse abroad. Although foreign markets are wide-open to the tobacco makers' most fertile grounds for growth, RJR has let the opportunity slip away through management missteps and economic malaise. It now has to unload its hobble international tobacco unit. To top things off, RJR's usually reliable profit machine, the Nabisco food division, is losing out to more nimble competitors in its cookie and cracker

line grows stale as a week-old Oreo.

RJR's numbers show more smoke than fire. While Philip Morris posted third-quarter operating gains up 10%, RJR's operating profits slumped 14%. For the full year, analysts expect RJR's earnings to drop 11%, to \$3.1 billion, on slightly lower sales of \$16.9 billion. That's after

operating earnings rose a paltry 3% last year.

The bottom line: Whatever comes of lawsuit-settlement discussions between tobacco companies and the states, RJR is in deep trouble. And the poor operating performance it has turned in lately has convinced many investors that part of the problem is Goldstone himself. While few doubt his smarts as a legal strategist, Wall Street has little regard for his management prowess. Critics complain he is too far removed from the fray. "This company has been very badly run," says Stephen Smith, executive vice-president of Brandywine Asset Management Inc., owner of 1 million RJR shares. "They need someone who can really turn it around."

LOOKING TO SPLIT? But then, many investors admit that isn't the reason they're sticking around. They view Goldstone as a sort of Mikhail Gorbachev, presiding over the last days of a decrepit empire. They're counting on the lift that could come if the industry settles and Goldstone can then follow through with plans to split RJR in three. Says Arthur Cecil of T. Rowe Price Associates Inc., which owns 4 million RJR shares: "We're really, really banking on a reversal of fortune."

Goldstone, who admits his operational knowhow is limited, lets the division chiefs alone while he grapples with legal and financial matters. "I'm not going to follow their every footstep," says Goldstone, who after his elevation to CEO in December, 1995, replaced all three division heads. Industry insiders and analysts generally praise the credentials of that team—Andrew Schindler, president of R.J. Reynolds, Reynolds International President



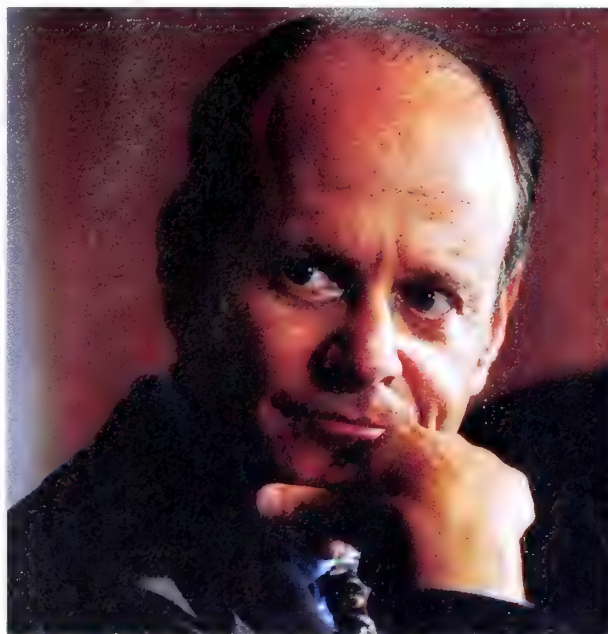


Nabisco's profits are tumbling. But it's still the jewel everyone wants to spin off

Pierre de Labouchere, and Nabisco President James M. Kilts. But they question their ability to rejuvenate RJR when the goal of the boss is to break up the company. In fact, if he succeeds, Goldstone cheerfully admits he doesn't want to stay with any of the divisions. "My job here will be over," he says.

That's because a settlement would free Goldstone, finally, to spin off Nabisco. The long-anticipated move should boost share prices—indeed, reports in October that a settlement might be imminent following the elections hiked RJR's stock 19% in five days, to near 30. A spin-off would also help pay down further the mountainous debt RJR took on in its leveraged buyout 10 years ago. Even without a settlement, Goldstone has settled on what amounts to a strategic retreat, giving ground across all fronts. If there is no agreement, he insists RJR will wind up in bankruptcy court.

LBO HANGOVER. How did it come to this? Goldstone and other RJR executives blame the costs and distractions of two epic battles: the 1988 leveraged buyout of RJR by Kohlberg Kravis Roberts & Co., and the courtroom fight waged by states and individuals seeking redress for tobacco-related injuries. The LBO boosted RJR's debt load to \$29 billion. KKR decamped in 1995. The debt has since been whittled down to \$9.5 billion, but the upshot is that this year, through Sept. 30, RJR shelled out \$664 million in interest payments. Add to



LEGAL BEAGLE: CEO Goldstone prefers to delegate day-to-day management

that the charges that all tobacco companies already are paying states—\$457 million so far this year for

RJR. Philip Morris paid about the same in interest and twice as much to states but is three times RJR's size. "You can't operate on a shoestring against a competitor as powerful as Philip Morris," Goldstone says.

History alone, though, can't explain why RJR continues to lose ground. In the U.S., the company has been slow to defend its cigarette brands, which include Winston, Camel, and Salem. Philip Morris started the decade with 42% of the U.S. market, vs. 30% for RJR. Since then, Philip Morris has gained 8 points,

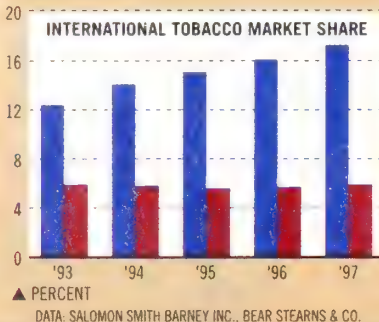
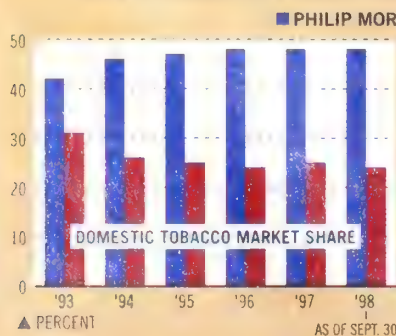
while RJR lost 6%. Brown Williamson, the U.S. subsidiary of Britain's well-heeled BAT Industries PLC, has also grabbed share points this decade in the U.S. market. Sure, Philip Morris spent \$212 million for U.S. cigarette ads in 1997, while RJR shelled out \$126 million—a haul above its 1990 level. But the '90s are full of stories of small companies that outmaneuvered giants with a tighter brand focus. That hasn't been in evidence at RJR.

SALEM'S LOT. The situation is grimmest for RJR's lesser-ranked brands, which have suffered from a lack of marketing support. Salem, the company's No. 3-selling premium cigarette, hasn't had a new ad campaign since 1995. Salem's sales fell in the first half of this year, part

of a long-term slide that has cut market share in half since the LBO. The bottom that can be said is that RJR arrested the years-long decline of its flagship Winston brand with the "No Bull" campaign kicked off in August, 1997. These clever ads repositioned the brand as an unpretentious smoke for regular guys, free of sugar and licorice additives. Camel, meanwhile, has held its own, despite the retirement of its iconic Camel spokesfigure in 1997.

The marketing contrast between Philip Morris and RJR is seen at Melton Food Mart in Louisville, where more than a quarter of the shop's 18,000 square feet is devoted to cigarette sales. Philip Morris has locked up the place, paying special bounties for favored

RJR'S CIGARETTE SALES ARE WEAK AT HOME AND ABROAD...



...WHILE NABISCO'S PROFITS CRUMBLE





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of
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Lackluster ads and hard-hitting rivals have slashed RJR's share of the tobacco market



treatment, an indulgence Reynolds can't as easily afford. Owner Joseph Melton III says Philip Morris' "contract money" is enough to pay his rent for the cigarette sales area. He also receives "flex funds" based on rising sales. Says Melton of his patron: "They've got the bucks." And, in return, the shelf space: Two-thirds of Melton's tobacco department is piled high with Philip Morris products. Though Winston and Camel occasionally put up displays, they remain for only a few days.

FOREIGN WOES. As bad as things are for RJR at home, they're worse overseas. R.J. Reynolds International, which provides one-third of RJR's cigarette revenues, saw tobacco sales fall 19% in the third quarter, while operating profits dropped by half. That followed a 5% sales slide in 1997. Says Reynolds International President de Labouchere: "1998 will be another year of disappointment." This summer, as it sought to cut costs, RJR shuttered three of its 28 foreign plants—in Hong Kong, Germany, and Hungary—partly because antiquated cigarette-making machines regularly mangled the product.

It wasn't supposed to turn out this way. Faced with stagnant U.S. and European markets, RJR began a big emerging-markets push in the late 1980s. Along with many of its rivals, RJR sought out countries where smoking rates were on the rise. But while Philip Morris and BAT have since surged ahead overseas, RJR spread its marketing too thin and moved too slowly as new opportunities arose. Those mistakes, compounded by economic recessions in Asia and Russia (page 80), have left RJR hustling for small pieces of many markets. Moreover, its expansion was haphazard, with much duplication of effort. There were 10 different Winston marketing campaigns around the globe, for instance, a mistake the company finally corrected this year by centralizing foreign opera-

tions in its international headquarters in Geneva.

Still, no structural revamping could make up for the fact that RJR has lacked the capital to gain significant market share in its far-flung outposts. "Their economies of scale are horrible in countries where they have just a percentage point or two," says Martin Feldman, a Salomon Smith Barney analyst. As a result, RJR belatedly plans to pull back from many nations where it has insignificant standing, particularly in

\$866 million, as sales drop another 4% in the third quarter. Nabisco shares—20% of the stock is publicly traded—have fallen to around \$15, down 24% from a 52-week high of 50¢ in April. No wonder Nabisco CEO Kilts likens his task to a trauma-team leader. "We have to stop the bleeding."

But Nabisco executives have been pledging to turn things around for more than three years. Kilts took over in January from H. John Greeniaus, vowing to shed noncore operations and focus on snack foods. For the 12 months end-

Sept. 30, market share for cookies in supermarkets slumped almost two percentage points, to 34%, and crackers slipped a half-point, to 47%. Kilts has yet to fill the void created by slowing demand for the Snackwells line of fat-free snacks. As consumers return to full-fat snacks that taste better, Snackwells' sales have fallen steadily for three years and now stand at half their 1995 peak. The best Nabisco can do is bring out a number of new Snackwells flavors. Says Andrew Carrano, vice-president of marketing at the Great Atlantic & Pacific Tea Co., the supermarket chain: "Without any really new items, they're not going anywhere."

ELFIN RIVAL. Keebler Foods Co., with about half Nabisco's share in both categories, has gained ground that Nabisco lost. For one thing, Keebler concentrated on some of the more consistent consumers around: children. And while Keebler only has a third of Nabisco's ad budget, its efforts have new products to pitch. Keebler has offered up an ever-increasing array of snacks, such as Hello and Tails animal-shaped cheese crackers. "We haven't seen that much from our competitors," chortled Keebler's retail honcho, David B. Vermeylen, in an analysts' conference call recently.

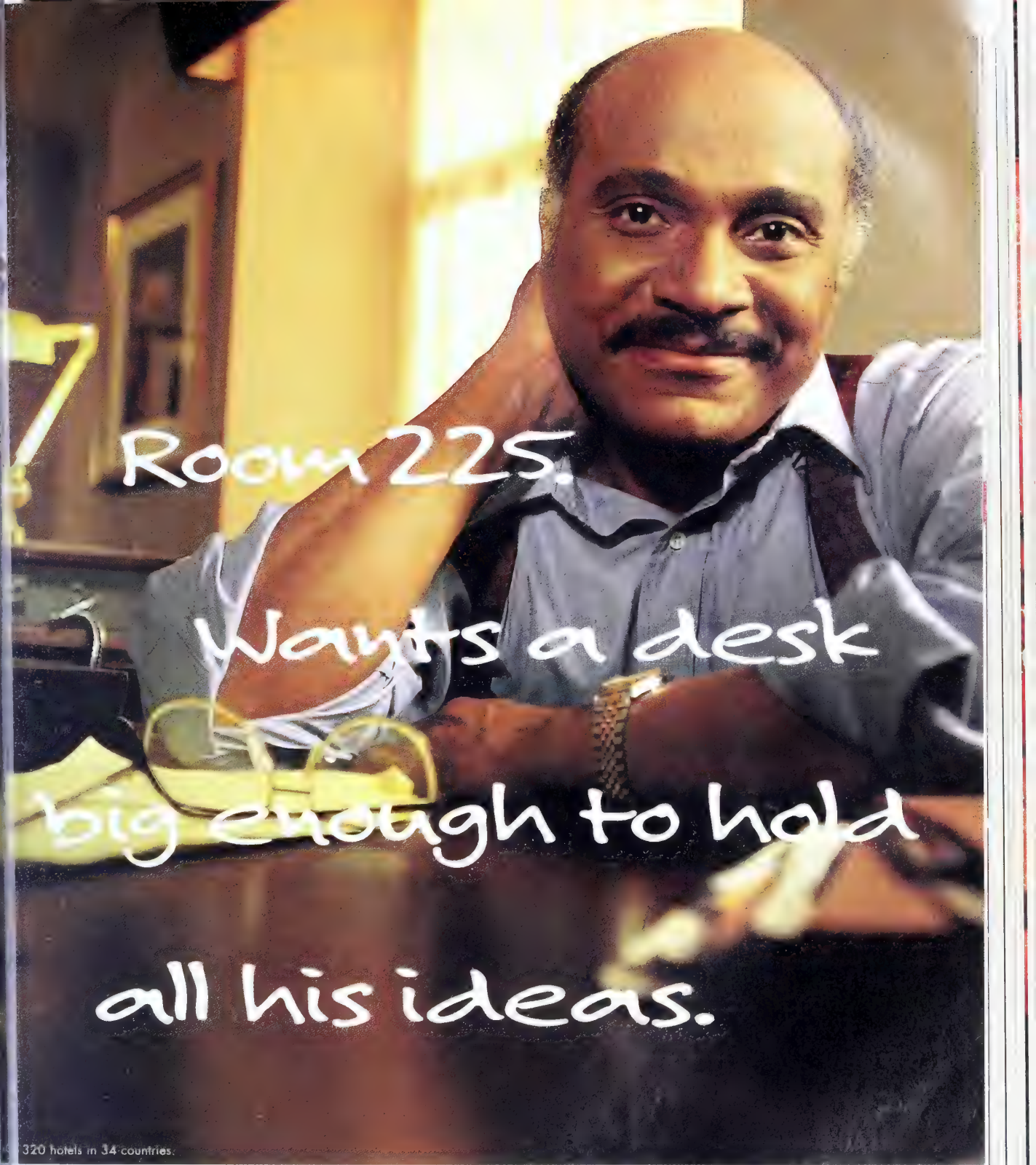
Now Kilts is in the midst of a massive restructuring that includes laying off 10% of his workforce and selling off brands like College Inn broths. That is supposed to let Nabisco scrape together enough



MACHO COMPETITOR: Philip Morris spends heavily to lock up store shelves

Asia. Goldstone's fondest wish for Reynolds International is to see the suffering unit married off to a strong competitor, says a

highly placed RJR executive. The spin-off that RJR shareholders have been waiting forever to see, of course, is that of Nabisco. Goldstone says he can't do that until RJR's legal situation is resolved—otherwise, tobacco plaintiffs could get a court injunction to stop such a deal. In the meantime, though, the cookie and cracker empire continues to crumble. The first serious signs of weakness came last year, when revenue fell 1.7%, to \$8.7 billion. This year, analysts expect operating profits to fall 20%, to



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savings to boost advertising. But he's haunted by a mess created in the last housecleaning, when Greeniaus trimmed the sales force by 1,000 people, most of them senior reps. Greeniaus figured less-experienced merchandisers could take up the slack. Wrong move: Stores started to complain of bad service. Shelves were disorganized or not stocked. "When you can't even get orders filled, you get very unhappy," says A&P's Carrano.

Of course, if Goldstone and other tobacco execs do patch together a sweeping settlement with the states, the stock market will be inclined to forgive a multitude of sins. Certainly some investors accepted long ago that Goldstone's legal abilities far exceed any hands-on management skills. Says Stephen A. Yacktmann, vice-president of Yacktmann Asset Management Co., which bailed out of RJR two years ago: "He's their lawyer, that's all. The game is over." But there's no telling when, or if, that settlement will arrive. And for RJR investors, there is a growing possibility that the end result will be three basket cases instead of one.

By Larry Light in New York, with Irene Kunii in Tokyo, Carol Matlack in Moscow, and bureau reports

A LONG HARD SLOG ON THE RUSSIAN FRONT

Don't blame the Marlboro man for RJR's latest debacle. On its ride into Russia, R.J. Reynolds Tobacco Co. has shown an uncanny knack for shooting itself in the foot.

Only last winter, the company was savoring the success of Peter I, a locally produced cigarette that in just two years had become one of Russia's top-sellers. But then RJR sparked a dispute with local tobacco distributors that crippled sales. Peter I sales fell 20% in the second quarter, just as RJR was finishing a \$120 million factory expansion in St. Petersburg. Making things worse, on Aug. 17, Russia devalued the ruble, sending the economy tumbling. By September, weak sales forced the factory to shut for several days. RJR now says Russia was largely to blame for its poor overall third-quarter results.

The saga of RJR in Russia illustrates how the company has squandered op-

portunities in foreign markets once thought promising. True, all cigarette makers are struggling in crisis-stricken emerging markets, as consumers switch from premium imports to cheaper smokes. But for RJR, the stakes are especially high. Russia is one of its biggest overseas markets, accounting for 11% of foreign earnings, vs. only 3.7% for Philip Morris Cos. And RJR's position in Russia mirrors its vulnerability worldwide: Its leading brand, Peter I, is a lower-priced smoke with thin margins and weak consumer loyalty.

RJR had high hopes when it entered Russia in 1992. Russians, who smoked nearly 250 billion cigarettes a year, were eager to switch from harsh, low-style cigarettes and were entranced by Western advertising. Philip Morris was making inroads with images of the American West in Marlboro ads. But while RJR soon matched Philip Mo-



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ading, its Winston and brands made little head-
 against its archrival's best-
 Marlboro and the mid-
 &M. Industry-watchers
 scattered its ads over too
 brands. "They diluted their
 ng," says a Moscow ad
 miliar with the effort. RJR
 zes say ad spending early
 tiny, as it and rivals con-
 ed on distribution.
D FALL. With Peter I,
 ck began to turn.
 ed in 1995 to capitalize on
 patriotism, its striking
 package was embossed
 e 18th century seal of
 ter the Great. But there
 hing imperial about its
 out 58¢ a pack, half the
 Marlboro. Sales took off,
 er I joined Russia's top
 RJR cranked up produc-
 year to 37 billion cigarettes.
 there, it went downhill. Last
 RJR got into a spat with nine
 ow-based distributors, who al-
 t it jacked up the prices they



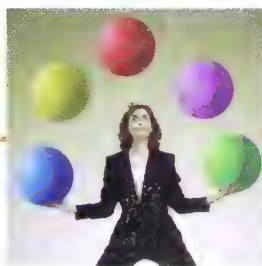
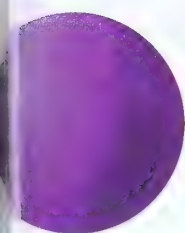
PETERS, PLEASE:
*RJR's Peter I brand
 has earned market
 share—but not loyalty*

paid while maintaining
 lower prices for small-
 er regional distribu-
 tors. The distributors
 perceived the move as
 an attempt to squeeze them out of cer-
 tain markets and retaliated by refusing
 to carry RJR products. "We had to draw
 the line," says Mikhail Bukov of Yu-
 nakt, a member of the group. RJR,

which will not comment pub-
 licly on the dispute, eventually
 made peace, and Peter I sales
 rebounded to pre-boycott lev-
 els. But the billions of ciga-
 rettes piling up in warehouses
 could not have come at a
 worse time. After devaluation,
 RJR had to discount heavily to
 pare inventory.

Even so, RJR has built a solid
 Russian beachhead with Pe-
 ter I. But, says a Moscow-
 based executive at a rival
 tobacco company, "they made a
 mistake in believing that they
 could suddenly command brand
 loyalty." While Peter I has
 picked up smokers who traded
 down from costlier brands, it has also
 lost some who fled to even cheaper
 brands. Philip Morris admits that Marl-
 boro sales have also softened but says
 its lower-priced brands are doing better
 than before. So instead of the sensa-
 tional growth it expected, RJR will have
 to settle down for years of hard work—
 and no more fumbles—in Russia.

By Carol Matlack in Moscow



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THE AUTO BANK



D

DaimlerChrysler's Jürgen Schrempp has built an empire of tremendous scope. Can he steer it through the global crisis?

Dne August day four years ago, while climbing the 12,812-foot-high Ortler mountain in the Italian Alps, Jürgen Schrempp descended a sheer wall and got stuck. Groping about, he couldn't find a hand- or foothold. He was roped to mountaineering legend Reinhold Messner, the first person to climb Mt. Everest without oxygen. What would happen, Schrempp asked up, if I fell? I'd catch you, replied Messner, and let you down. Marvels Messner: "So he jumped."

Courageous or crazy, it was vintage Schrempp. The lean, nonsmoking 54-year-old chief executive of Daimler Benz made a similar leap of faith last January when he approached Chrysler CEO Robert J. Eaton in his office in Auburn Hills, Mich., with a scheme to merge their two companies. In a clubhouse with Daimler colleagues after the 17-minute chat, Schrempp worried that he may have been too bold. His fears were unfounded. America's scrappy No. 3 car company and Germany's most revered brand will combine to become the world's fifth-largest carmaker when shares in DaimlerChrysler begin trading on Nov. 16.

Schrempp and Eaton are entering into an unprecedented business experiment. The auto industry has long been among the world's most international. But the DaimlerChrysler merger ushers in a new phase of global competitiveness, when the very biggest players in world's main regions unite as industrial behemoths of tremendous scope. Schrempp is judged both on his ability to run this mighty giant and on whether he can emerge as Europe's most forceful business leader.

TEST. He was certainly the dominant force in forging the merger. "I wasn't going to passively and be the object of someone's decision," he told 1,000 of Munich's glitzy as he introduced the new Mercedes S-class sedan last month. Schrempp had talked Ford Motor Co. in 1997, but the U.S. company's family ownership structure would have complicated a merger. Sources close to Daimler say that Schrempp also approached Honda or Co. but found the cultural differences great.

He timing of the DaimlerChrysler merger enormous pressure on the two companies.

THE WHEEL
Schrempp is steering the new giant through both machismo and subtlety

Schrempp and Eaton are trying to pull off their deal amid a global economic crisis that is expected to hit the world auto industry

next year. Schrempp sees 1999 industrywide unit sales slipping by 4% in the U.S., by 2% to 3% in Western Europe, and stagnating in Germany.

As a global company, DaimlerChrysler will get a new kind of CEO. Schrempp, who will take over on his own by 2001—and perhaps sooner—comes across as a macho, take-charge guy. But he is also a subtle man in many ways. He listens carefully to others before taking action. His friends include artists, photographers, and mountain climbers, as well as other powerful executives.

Long tours of duty outside Germany have given him a business perspective broader than many of his countrymen's. As in mountaineering, his clear thinking is balanced by instinct. "Many people think emotions are not needed in business," he says. "I think emotions, what I call the stomach and the heart, are the decisive factor at the end of the day."

The deal's acid test will come in the interplay of Schrempp's personality with those of Eaton and other Chrysler executives. "We, from day one, have been extremely direct with each other and open," Eaton says. If this merger is going to work, human factors will be of paramount importance.

There's plenty of logic behind the marriage. Chrysler's minivans and sport-utility vehicles—staples in suburban driveways across the U.S.—stretch Daimler into North America's vast middle market. Daimler can boost Chrysler's 1% market share in Europe while also upgrading the Detroit carmaker's quality and technology with Mercedes' gold-plated engineering. Together, the auto makers believe they can conquer emerging markets in Asia by jointly developing a low-cost car.

Eaton and Schrempp are trying at every turn to demonstrate trust and cooperation. Last month, Schrempp arrived for a meeting of 35 executives at a Stuttgart restaurant, after Eaton had spoken. "Whatever Bob said, I'll automatically sign on to right now," he said.

The first priority for both chairmen is to meet a pledge to cut \$1.4 billion in costs in 1999. They'll search for ways to save money in everything from shared overhead in finance and personnel to getting a better deal on steel. "First, we have to prove something to the world," says Schrempp, pounding his fist on the table over breakfast in his Stuttgart office. "We have to put that \$1.4 billion on the table."

Preserving distinct brand identities while

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THE MERGER AT A GLANCE

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HOT MODELS

Mercedes: S-Class luxury sedan, SLK 190 roadster.
Chrysler: Dodge Durango, Plymouth Prowler

DATA: SALOMON SMITH BARNEY, COMPANY REPORTS



cutting costs will be tricky.

The two companies will avoid a platform strategy that could muddy the Mercedes and Chrysler images, since customers might balk at paying up to \$93,000 for an S-Class sedan with a Chrysler drive train. But there is room for common design and engineering in less visible areas, such as sound systems. And some production can be shared. For example, Chrysler's Jeep plant in Graz, Austria, will build the Mercedes sport-utility vehicle, the M-Class.

In the core markets of Europe and North America, Chrysler and Mercedes will maintain separate showrooms, even if they are owned by the same dealer. But combining logistics, service, warehousing, and technical training will dramatically boost sales volumes, analysts figure. In markets where the companies have a weak presence, such as Asia, they are considering mixing the brands, perhaps selling Mercedes' heavy trucks

1999 JEEP GRAND CHEROKEE

Chrysler brings its
minivan, pickup
and sport-utility
vehicles to the mix

and Chrysler's light trucks together, for example, to cut costs.

The Corporation

The company's big challenge will be reacting speedily to new trends with just the right models. While the U.S. will see a continued blurring of lines between cars and trucks, Europe has room to catch up in minivans and leisure vehicles. Schrempp expects to see several versions of sports cars. Inspired by Volkswagen's popular new Beetle, he has also asked his designers to think about a car with a retro look.

"CATASTROPHE." Yet at its most fundamental level, Daimler-Chrysler's success hinges on melding two starkly different corporate cultures. Daimler's methodical decisionmaking could squelch Chrysler's famed creativity. Mercedes' reputation for luxury and quality could be tarnished by Chrysler's down-market image. If they can't create a climate of learning from each other, warns Ulrich Steger, a management professor at IMD, the Lausanne business school, "they could be heading for unbelievable catastrophe."

If that happens, it won't be the first time. Big cross-border mergers have a poor track record. In most cases the hoped-for savings are not realized, the weaker partner is stripped of its best assets, and margins plunge. To avoid a similar fate, Schrempp and Eaton analyzed 50 large-scale mergers from many industries before launching their own. They found that 70% had stumbled, most for lack of clear targets and speed. "What you don't do in the first 12 to 24 months will be very difficult to do later," Schrempp says.

That's especially true for two industrial icons from business cultures that couldn't be more different. Chrysler is the very symbol of American adaptability and resilience. Having survived a near-death experience that required a 1979 government bailout, it scrambled

under legendary CEO Lee A. Iacocca, and then Eaton, to become one of the world's leanest and nimblest car companies.

Daimler Benz, meanwhile, has long represented the epitome of German industrial might, its Mercedes cars the purest examples of German quality and engineering. But despite Schrempp's shakeup at the top, its middle ranks exemplify the hierarchical, procedure-driven German management style that could smother an agile company like Chrysler.

So over the next two years, he and Eaton will forge an identity for the new auto maker, creating a global company with its own product lineup and personality. For example, labor relations will break new ground.

Based in Stuttgart, the company will retain the German two-tier board system, but a member of the United Auto Workers will join German union and Daimler works-council members on the supervisory board, which oversees management.

Schrempp and Eaton will also spend the next two years taking inventory. They'll look at the strength of each model and brand and decide which market segments to target. Schrempp sees potential in Europe for Chrysler's 300M, a luxury performance sedan. More pickups and heavy trucks will be directed to South America. Mercedes must decide whether to sell the little A-Class hatchback in the U.S. and what to do with Smart, the tiny city car built with the Swiss maker Swatch that debuted to mixed reviews in October.

Together, the co-CEOs will assign a budget, select the appropriate technologies, and set a specific quality standard for each model. Once that process is completed in 2000, Eaton, now 58, will retire. There is much speculation in Detroit that he might leave earlier, and Eaton recently told senior Chrysler executives "At any point that I feel redundant, I will go."

SLEEK LINES. As far as products are concerned, Daimler-Chrysler will start life in good health. Mercedes has a sleek new lineup, having launched 10 new models in the past three years, including the sleek SLK roadster. Daimler has little overlap with Chrysler, which brings strength in minivan, sport-utility vehicles, and pickups. Financially, too, the new company is strong. Daimler and Chrysler are among the world's most profitable carmakers. Salomon Smith Barney analyst John K. Lawson figures next year the combined company will have operating earnings of \$7.06 billion on revenues of \$155.3 billion. And with a cash stash of \$19.4 billion it could weather even a deep recession.

This auto juggernaut will loom large in Germany Inc. It will be the country's biggest industrial company by far, with shares amounting to a huge 13% of the DAX stock index. DaimlerChrysler moves toward U.S.-style, profit-motivated management and compensation. The changes will reverberate throughout Germany's egalitarian business culture.

Cutting costs while maintaining quality will be ticklish

Schrempp, too, may come to represent a formidable presence on Germany's business landscape.

If he decides to slash jobs, for example, a revamp of the German labor

1999 MERCEDES S-CLASS





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ONE DRIVER

Chrysler Chairman.
Eaton will retire after
the transition

agreements, he may find himself going head to head with Gerhard Schröder, Germany's left-leaning new Chancellor. That could set a potent precedent for other German executives longing to break

from the country's often strangling business regulations.

If there's a European executive whose style resembles that of a no-nonsense American CEO, though, it's Schrempp. He rattled Corporate Germany by nakedly pursuing profits when he took over Daimler Benz in 1995. That year the company posted a \$3.45 billion operating loss, the worst in German postwar history. Schrempp restructured the industrial giant and axed businesses that couldn't meet tough new standards, turning a profit again in 1996. In three years he has metamorphosed from one of German business's most vilified men to one of its most imitated.

The Corporation

Now, at Daimler-Chrysler some 98 integration teams are ready to hammer out details on topics from software to production. An 18-member management board is charting strategy. Where one company is clearly more advanced, decisions are easy: For instance, Daimler will handle fuel-cell and diesel technology, and Chrysler will keep its electric-vehicle project.

Other decisions are tougher. Chrysler invented the minivan, but Daimler was far along in developing its own. So the two are hotly debating whether to ditch Daimler's version or offer a separate luxury model. One senior Chrysler manager observing the process says that the way this decision is handled—rather than the outcome—will determine whether he chooses to stay with the company.

Another test will involve jobs. The new board is analyzing the next two management layers to decide between Daimler and Chrysler employees for each slot. "I suspect we'll lose some people," Eaton says. So far, though, decisions have been even-handed. On Nov. 3 the companies announced that

TARGETS AND ACTION PLANS

1999

- \$1.4 billion in cost savings
- Consider joint procurement, combined overhead, and shared technology, such as for diesel engines.

1999-2000

- Complete integration
- Assess market position of every model and brand, then assign appropriate technology, cost, quality standards.

AFTER 2001

- Realign top management
- Schrempp will become sole CEO. Leaner management could include a global R&D or manufacturing function, with sales and marketing one level below.

Chrysler executives will run procurement and legal affairs while Daimler executives will head finance and information technology.

Schrempp is playing his cards close to his Italian chest, but industry experts who know him predict that by 2001 he will abandon the unwieldy new management board. Schrempp admits he can visualize a time when "you also have somebody in charge globally for production." He won't say more. But one likely option would be a lean corporate center for human resources, finance, and planning. Individual board members would be responsible for trucks, Chrysler cars, and Mercedes cars, as well as for purchasing, research and development, and production—with no redundancies. Sales and marketing units could be one level below the board.

Such a shakeup would not surprise employees from the

Daimler side. Schrempp's focus on goals has earned him a reputation as cold-hearted. It started in 1989, when Daimler-Benz Chairman Edzard Reuter put the young truck executive in charge of forming a new aerospace unit, now called Daimler Aerospace. First Schrempp pulled together four aerospace companies that Daimler controlled and managed them as a holding company. Buffeted by defense cuts and a rising dollar, he needed more drastic steps. So he cut out the management and controlled each unit directly.

MAJOR MISSTEP. Then in June, 1994, Reuter appointed Schrempp heir apparent to take over Daimler-Benz in May 1995. All that year Schrempp prepared his strategy, and once in power, he executed it with exacting swiftness. The goal: to reverse his former mentor's grand scheme of building an integrated technology company. First, he streamlined the head-office hierarchy, cutting staff by more than 75%. "You have to sweep the stairs from the top down," he says. Then he examined each business unit, grilling frightened managers nearly to tears and setting a 12% return-on-capital target for each unit. When the dust had settled, Daimler was down to 23 units from 35 and carried 63,000 fewer people on the payroll.

Schrempp did make one severe miscalculation. In 1995 the German government decided to cut sick pay to 80% of wages from 100%, and Mercedes was the first company to implement the policy. Works-council chief Karl Feuerstein immediately instructed workers across Germany to stage illegal work stoppages. Schrempp stood fast for three weeks. Then when he realized he couldn't win, he called Feuerstein to home and gave in.

All along, Schrempp was thinking about seeking a partner for Daimler. By 1996, he had decided that a carmaker could compete without a full range of products, and he could stretch the Mercedes brand any further downmarket. But first he had to get Daimler in shape for a merger. Mercedes-Benz was a separate operating company with its own board, run by Helmut Werner, who was a hero in Germany for saving the Mercedes lineup. Schrempp wanted to give Dai-

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BREAKING THE PLASTIC MOLD.

CITIBANK



ler direct operating control of Mercedes. "We had steps and steps, and layers and layers," Schrempp explains, moving Marlboros around the table to illustrate. "It took months to make a decision."

In 1995 and early 1996, talks between Eaton and Werner about a joint venture for all their international businesses outside Europe and North America had bogged down because of this structure. That failure helped spur Schrempp's reorganization. Although Werner fought to keep Mercedes independent, Schrempp prevailed with the supervisory board. By January, 1997, Mercedes was folded into Daimler, Werner was

The Corporation

out, and Schrempp was running a car business.

Schrempp was not always so ambitious. He was raised in Freiburg, a university town in southwest Germany. But he had too much fun skiing and dancing to finish his high-school-level studies. His father, a clerk at the university, persuaded him to learn a trade, so Schrempp joined Daimler Benz as a 15-year-old apprentice mechanic. "I learned to do the most with as little effort as possible—I still do," he says, grinning.

He met his wife, Renate, when he was 18 and she a year older. For 25¢ they would listen to records in the jazz cellars of Freiburg. Schrempp then borrowed \$25 from his dad to buy a trumpet and taught himself to play jazz without reading music. The trumpet, which Schrempp still plays for fun, sits in his office. Eventually, Schrempp earned an engineering degree. He rejoined Daimler in 1967.

But despite being a 31-year Daimler veteran, he escaped the stifling Stuttgart culture early on. After a decade mostly in sales, he lived in South Africa from 1974 to 1982. Responsible for customer service, he hosted lively parties that helped sell fleets of trucks. He left for a two-year stint in Cleveland, where he got rid of troubled truck unit Euclid. Then he returned to South Africa for two more years as vice-president and then president, lecturing against apartheid to the elite even as he sold them their cars. Indeed, Nelson Mandela has made him an honorary consul to South Africa. Schrempp still has a house in Cape Town and owns a game reserve with two friends near Kruger National Park.

MOUNTAINEERING

"The only time I do what others tell me to," says Schrempp, with a grin.

Returning to Stuttgart 1987 as No. 2 in the truck division was a bit of a shock. "I displayed contempt for tribal wars and the small German mind-set," says an adviser who first met him then. So Schrempp has cultivated a circle of friends unrelated to Daimler's work. His modern, art-filled home near the woods outside Stuttgart is warm and welcoming. Schrempp dispenses drinks and cigars from behind the bar to pals including famed photographers and painters.

He turned to this circle for help during the crisis over the new A-Class model last October. When a Swedish auto journalist tipped over the new hatchback in a test maneuver, Schrempp took personal charge of containing the potential public-relations disaster after three weeks of bad press. On Sunday evening he invited eight friends to his home, and over Italian sausages, bread, and wine he listened to their advice. By the time he met with public-relations specialists the next day, he had decided to stop shipping the car for three months until the problem was fixed. Mercedes installed an electronic stabilizing system that cost \$182 million in 1997 and 1998 but has rescued the A-Class's reputation. Unit sales are expected to hit 200,000 next year.

NO FEAR. Schrempp is a man of seemingly boundless stamina. He can socialize into the wee hours and still get up early to work out in his home gym. He is also a passionate mountain climber. "It's the only time in my life I do what others tell me to," he says. Indeed, he is accustomed to getting his way. Last August the new management board gathered at a resort in West Virginia. One night after dinner Schrempp asked Eaton if DaimlerChrysler's stock certificate could include a photo of Karl Benz, in addition to Gottlieb Daimler and Walter Chrysler as planned. Eaton said that wouldn't be fair. But Schrempp was getting heat from his home region, where Benz was founded. He cajoled Eaton for at least an hour, finally offering to donate his replica of the first Benz three-wheeler to the Chrysler museum. Eaton relented. "No one knows what a stock certificate looks like anyway," says Eaton.

There will be many more such sessions over the coming months, as Daimler and Chrysler nail down the details of their merger. And if an economic downturn slashes auto sales, there could be some tight moments. Chrysler execs, like Schrempp's climbing partners, may find that's when Schrempp is at his



JURGEN SCHREMP

AGE 54

EDUCATION High

school dropout, engineering degree, apprentice mechanic

CAREER HIGHLIGHTS Named CEO of Mercedes-Benz South Africa in 1985, CEO of Deutsche Aerospace in 1989, CEO of Daimler-Benz in 1995

FAMILY Married with two sons

HOBBIES Mountain climbing, tennis, jazz trumpet, chess

FAVORITE CIGAR Partagas

DATA BUSINESS WEEK

best. Last July, in the Italian Alps, a fierce storm forced his climbing group to ditch the metal and take cover. As lightning ricocheted across the rocks, Schrempp remained serene. "He has no fear," says climbing partner Hubert Burckhardt, a Munich publisher. Given the challenges of this huge merger on his face, Schrempp may be exactly what is called for: a tough man in a storm.

By Karen L. Miller in Stuttgart with Joann Muller in Auburn Hills

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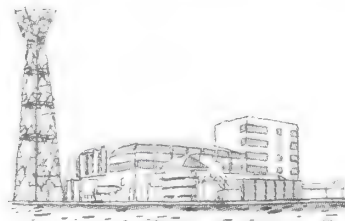
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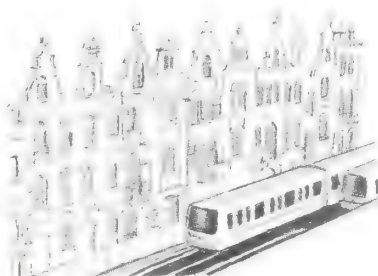
GHENT POWER STATION - BELGIUM



SAINT-PIERRE HOSPITAL - BRUSSELS - BELGIUM



AALTER TOWN HALL - BELGIUM



VAL DE LILLE UNDERGROUND - FRANCE



SERAING POWER STATION - BELGIUM



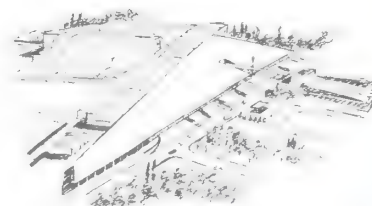
Dexia, the banking partner of the government in Europe, was created by the merger of Cr dit local de France and Cr dit Communal de Belgique. Already



MUNICIPAL WASTE TREATMENT PLANT - AVIGNON - FRANCE



MANCHESTER METROLINK - U.K



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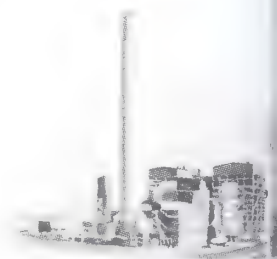
BIOMASS TO ENERGY PLANT
THETFORD - UK



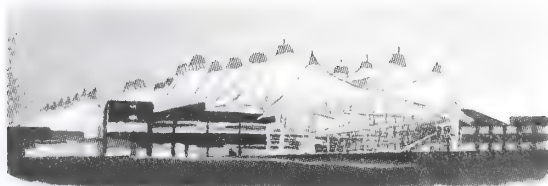
WASTE WATER TREATMENT PLANT
CANNES - FRANCE



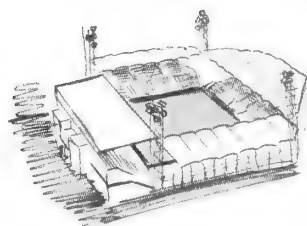
TOULOUSE UNDERGROUND - FRANCE



COGENERATION PLANT
CARNEY'S POINT - NEW JERSEY - UNITED STATES



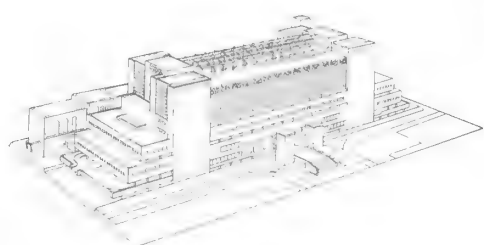
DENVER INTERNATIONAL AIRPORT - COLORADO - UNITED STATES



CHARLEROI FOOTBALL STADIUM - BELGIUM



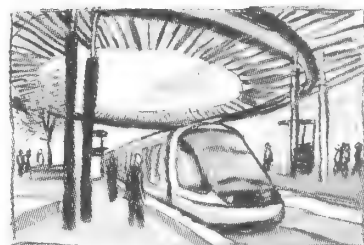
LYCÉE LOUIS LE GRAND - PARIS - FRANCE



GOVERNMENT CENTRE - BRUSSELS - BELGIUM



TUNNEL LINKING E25 AND E40 - LIEGE - BELGIUM

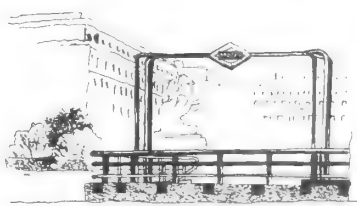


STRASBOURG TRAMWAY - FRANCE

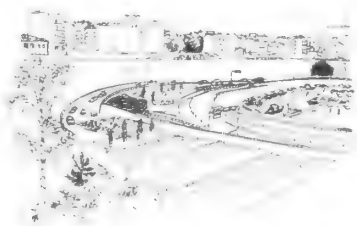


ROBERT DEBRE HOSPITAL - PARIS - FRANCE

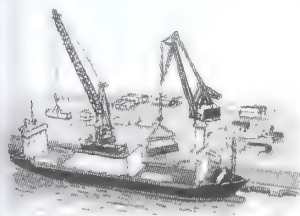
the financing of public service
and with shareholders' equity of
euros, Dexia is currently expanding
insurance and asset management.



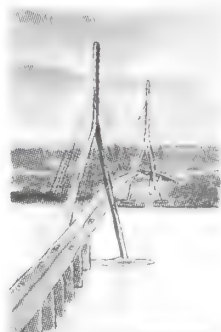
MADRID UNDERGROUND EXTENSION - SPAIN



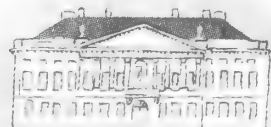
PRADO CARENAGE TUNNEL - MARSEILLES - FRANCE



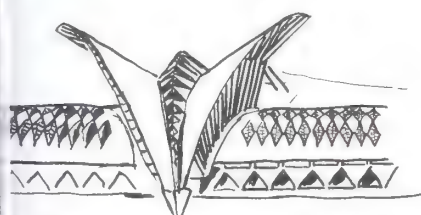
BORDEAUX PORT - FRANCE



NORMANDY BRIDGE - LE HAVRE - FRANCE



PLACE DES MARTYRS - BRUSSELS - BELGIUM



LYON-SATOLAS INTERNATIONAL AIRPORT - FRANCE



Crédit Communal

EDUCATION

WHY VOUCHER SCHOOLS MAY NOT GRADUATE

They work, but unions and bureaucrats are gunning for them



"I LOVE IT": Vouchers allow Broadus' daughters to attend a private academy

When Michelle Broadus moved her family from Pittsburgh to Cleveland in 1995, she got a shock: Even by big-city standards, Cleveland's public schools were a mess. "They had 40 kids in a class, the water fountains didn't work, and the bathrooms were stopped up," she says.

On welfare then, Broadus couldn't afford private school. But she did qualify for a pilot program that awards tuition vouchers worth up to \$2,500 to families of 4,000 low-income children chosen by lottery. Today, her daughters Tiara Smith, 9, and Zadia Rouse, 8, attend Hope Central, a private academy. They like their classes and get better grades. Broadus' verdict: "I love it."

Cleveland's three-year-old experiment, closely watched by school districts across the nation, spotlights why school vouchers hold promise for inner-city families such as the Broaduses. Early research shows that voucher-funded Cleveland kids, freed from the decrepit city system to attend one of 52 private or parochial schools, often do better.

Yet Cleveland also presents a lesson in *realpolitik*: Despite such potential and considerable support in state legislatures, vouchers are unlikely to succeed. Fervent opposition from unions

and administrators, fearful that vouchers siphon off students and funding, has precluded extending the program to more of the city's 77,000 children in public schools. The city has only grudgingly provided bus service for voucher kids, and suburbs such as Lakewood and Euclid have refused to participate at all.

As a result, the only new voucher efforts in Ohio likely will be privately funded. And reformers reluctantly have started redirecting efforts into charter schools, quasi-independent institutions that avoid the voucher controversy by remaining publicly funded and controlled. "We are at a historic moment of a critical debate" on school choice, says Jeanne Allen, president of the Center for Education Reform in Washington.

Vouchers represent a long-held dream of Republicans to rescue city schools. The theory: Poor students get the same chance as wealthier peers to opt out of an inferior public system. And competition from private institutions forces public schools—entrenched monopolies otherwise—to get their acts together.

In Cleveland, as in Milwaukee, the nation's other major voucher lab, reality has confirmed theory on some counts. Harvard University study found that two-thirds of voucher parents are "very satisfied" with the academics at the kids' mostly parochial schools. At Hope Central and sister school Hope Tremont, both founded by Akron tool-and-die entrepreneur and philanthropist David Brennan specifically to accept voucher kids, reading improved by 5 percentile points and math by 15 percentile points during the first year.

VOCAL FOES. Nevertheless, city education officials have opposed the pilot from the start, even though their system was so troubled that it had been remanded to the state's, and then the mayor's, control. The powerful Cleveland Teachers' Union has also lobbied intensely against it. Vouchers, says Michael Charney, the CTU's professional-issues director, "divert attention away from urban education by substituting a life raft for a tiny group of people."

Civil libertarians, meanwhile, have attacked the use of public money for religious schools. The Ohio Supreme Court is likely to rule by yearend on a lawsuit filed by the American Civil Liberties Union and others. A similar Wisconsin case was decided in June in favor of Milwaukee's program, but voucher opponents have appealed that ruling to the Supreme Court.

Such battles have discouraged supporters and left Cleveland's voucher experiment treading water. Ohio's state legislature has made no move to expand funding—waiting, in part, for the result of the gubernatorial race pitting Republican Robert M. Taft, a voucher supporter, against Democrat Lee Fisher, a vocal foe. There are plans to introduce vouchers in Cincinnati, Dayton and Toledo, but financing there would come entirely from private sources.

Lawmakers in Florida, Texas, Maine, Vermont, and Washington, D.C., have considered funding vouchers but won't commit before the Cleveland and Milwaukee court cases are resolved. So political support is shifting to charter schools. Cleveland already has five charter academies with more planned. It's a calculated hedge: To many reformers, vouchers are the ideal. If enacted, they may work better. But charter schools have become the politically viable compromise.

By Peter Galuszka in Cleveland

Let's fix our public schools, critics say, not just give a lucky few "a life raft" out

AGED IN A GREAT MUTUAL ENTERPRISE IT IS GREAT BECAUSE IT SEEKS TO PREVENT CRIPPLING INJURIES AND DEATH BY REMOVING THE CAUSES OF HOME HIGHWAY AND WORK ACCIDENTS IT

A photograph of a man with long brown hair, wearing a light blue button-down shirt, lifting a young child with curly brown hair wearing a yellow shirt piggyback. They are in a wooded area with sunlight filtering through the trees. The text is overlaid on the top left of the image.

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COMMENTARY

By Keith H. Hammonds

OXFORD MENDS ITS HEALTH—BY PASSING THE BUCK

The hemorrhaging has been stanchied at Oxford Health Plans Inc.; the patient appears stable. On Oct. 30, a year after its collapse amid computer mayhem and \$916 million in ensuing red ink, the Norwalk (Conn.)-based health-maintenance organization reported third-quarter results ahead of plan—a loss of just \$47 million and \$9.5 million negative cash flow. Among oft-bruised HMO investors, that amounted to cheery news, and Oxford's shares rose nearly 40% in three days, to 12.375.

Kudos, then, to Norman C. Payson, the physician-executive drafted to run Oxford as part of its bailout last May by investor Texas Pacific Group. Officially, his turnaround strategy cites eight "areas of action," but they come down to three: raise prices, cut costs, and get out of bad businesses. Payson has shored up a capital position only a bankruptcy attorney could have loved, and analysts now cautiously buy his assurance that Oxford will make money by late 1999.

TROUBLING QUESTIONS. Still, Oxford's resuscitation raises troubling questions, less about Oxford itself—survival, after all, is better than the alternative—than about the future of managed care in general. For in returning Oxford to fiscal normalcy, Payson has revealed several fundamental weaknesses of the managed-care industry.

For one thing, most HMOs still haven't figured out how to actually manage care. Payson says Oxford hopes to improve hospital discharge

planning and to prevent unnecessary procedures; by yearend, the company will station a utilization nurse at 15 big hospitals. For now, though, it has taken the easy path, reducing certain fees paid to specialists and hospitals. And it's stretching out those payments longer: Medical accounts payable grew to 79 days in the third quarter, up from 50 days a year ago.

Both actions put Oxford more in

line with its competitors. But do they improve care? More likely, they just transfer cash-flow problems to medical providers. "If nothing changes, we're all headed for bankruptcy," says Ronald J. Del Mauro, president of St. Barnabas Health Care System, a combine of 10 New Jersey hospitals. "If you don't deal with real issues of medical management, it's just a numbers game until it breaks."

Oxford simply joins its rivals in transferring, not tackling, higher costs—leaving employers to bear the brunt of medical inflation

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Oxford's failure to pay doctors on time, coupled with many millions still owed from 1996 and 1997, exacerbates the problem. For managed care to work, physicians and hospitals must cooperate with insurers—to accept data-driven guidelines for efficient practice patterns, for example. As it is, suits from 500 New York doctors seeking back pay will head to arbitration this month. George Long-

streth, a Fairfield (Conn.) surgeon, remembers Oxford paying him 40% of his bill for a cancer operation, then demanding \$200 back. "Now Payson wants me to forget that?" he asks. "How much are we going to forget how soon?"

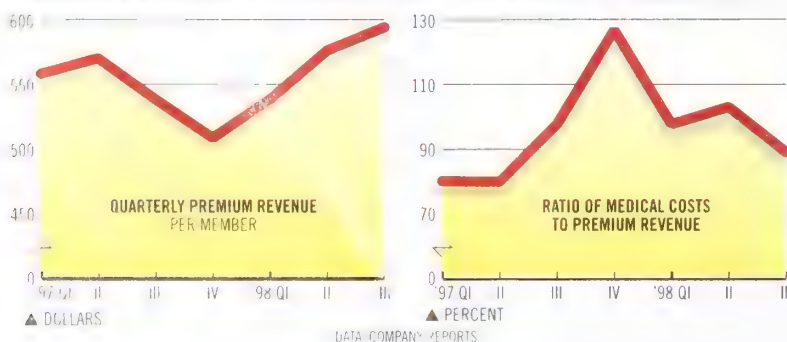
More to the point, HMOs aren't doing many favors for the companies and employees paying the bills. Oxford's commercial premiums were up

7.5% in the latest quarter, with 9% growth expected for next year. Anne K. Anderson of Atlantis Research, like other analysts, says that's just the right medicine. "The product is underpriced" relative to competitors', she says. But ultimately, Oxford simply is joining its rivals in passing on, rather than confronting, higher expenses—leaving employers to bear the brunt of medical inflation.

All the while, Oxford and other HMOs are looking more and more alike. Payson argues that his company still has "that special quality, a commitment to the consumer." That's hard to measure, though. More obvious is Oxford's loss of exclusivity. It once offered a roster of happy, well-paid doctors unavailable with other HMOs. As Oxford's practices came to resemble its rivals', though, doctors sought other HMO contracts.

Aetna Inc., which has been gunning for Oxford's weak spots, now says 80% of its doctors are also in Oxford's plan. That's good news for consumers but not for insurers, which must sell look-alike networks mainly on price. So far, brokers say, few Oxford customers are defecting. But this isn't a strategy for long-term profitability—or, arguably, for quality medicine. The old Oxford wasn't tenable. But the new model isn't going to do wonders for health care, either.

OXFORD'S PRICING IS STRONGER... ...BUT COSTS REMAIN HIGH

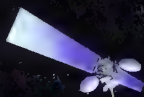


Hammonds writes on social issues.

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MYSTERY INGREDIENT

Are Rosenfield and Flax smart or just lucky? Probably a bit of both

\$100 million into CPK to finance its expansion. "It's classic," says Robert S. Goldin of Technomic, a restaurant consulting firm. "Sell to a big company at an inflated price during a bubble and then buy it back on the rebound."

Pepsi executives, of course, don't see it that way. "It was an experiment for us," says Ken Stevens, Pepsi's ex-head of strategic planning who left the company in 1996. "We bought it for a growth vehicle. But the expansion strategy pushed by Pepsi overwhelmed Flax and Rosenfield, and they lost money for each of the five years Pepsi owned it. Then, a major strategy shift, the giant exited its \$11 billion restaurant businesses last year, and Pepsi's flop became Flax and Rosenfield's windfall.

ODD COUPLE. Are they just smart or just plain lucky? Probably both. They don't look like the types who could get the bet-

ting of a \$21 billion corporate giant. At first glance, the duo seems an almost comical match. A big bear of a man with a shock of white hair, Flax towers over Rosenfield, who is slight and balding. Dressed in matching sweaters, they adorn CPK menus, beaming broad smiles.

It's not just on CPK's menus that the two pair up. They say they do nearly everything together, even finishing each other's thoughts. Flax, 56, is the risk side of the collective brain trust: an impulsive, creative one, both say. Rosenfield, 53, is the left side: the analytical business mind. Both share an irrepressibly upbeat mood. Friends since 1980, they double-dated in their bachelor days. When Rosenfield was about to get married, he even asked Flax's permission. And after the two had worked together for 20 years, they threw an anniversary party for themselves. "The first time I saw them, I said, 'Who are these clowns?'" says Burton Goldberg, an old friend and former law client.

Flax and Rosenfield became buddies when they were both working as prosecutors in the Los Angeles District Attorney's Office. Later, as partners in their own law firm, they specialized

ENTREPRENEURS

HOW TO HAVE YOUR PIE AND EAT IT, TOO

California Pizza Kitchen's co-founders sold it to Pepsi in a sweet deal—and rebought it in a sweeter one

If ever there were charter members of the Pepsi Generation, Rick Rosenfield and Larry Flax fit the bill. The duo, co-chairmen of California Pizza Kitchen Inc. (CPK) restaurants, just love the stuff. Walk into their sunny offices overlooking the Los Angeles International Airport and they're quick to offer you a Pepsi. Then there's Flax's rambling, 10-bedroom Beverly Hills lime-

stone mansion. Rosenfield calls it "the house that Pepsi built."

He's not kidding. Back in 1992, PepsiCo Inc., the soda giant's parent company, bought 67% of the pizza chain for \$94 million. For their initial \$200,000 investment eight years earlier, the pair got \$34 million in cash and kept a 24% stake. Staying on as co-CEOs, they also got the chance to hugely expand the company on Pepsi's dime.

But it gets better. After more than tripling its size, to 90 restaurants, the pair joined with a venture-capitalist firm that bought back control of the chain for slightly less than Pepsi originally paid. Meantime, Pepsi had pumped more than

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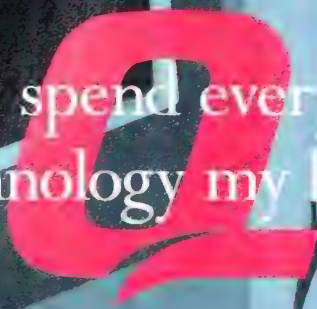
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white-collar crime cases. After hours, though, the pair cultivated their cooking skills to impress dates. Their new talents also got them thinking about ways to escape grueling legal careers. Their first foray into restaurants, though, a trendy L.A. Italian joint, ended in bankruptcy in 1974.

A screenplay, then a mobile skateboard park, also went nowhere. Finally, in 1984, Flax and Rosenfield thought

and Rosenfield figured the real money would be made selling similarly jazzed up pies at cheaper prices. They raised \$500,000 and hired Puck's original pizza chef for their first restaurant, in Beverly Hills.

HOLD THE ONIONS. CPK's customers, though, turned down rabbit-sausage-and-radicchio concoctions in favor of a new pie: barbecue-chicken pizza. Those soon accounted for half the restaurant's

the scene, a killing in an initial public offering seemed a sure bet. Instead, Pepsi swooped in, agreeing to pay Flax and Rosenfield a lofty price of about 60 times cash flow, nearly double what other chains were selling for. Still, Stevens says the price made sense given CPK's growth prospects. "Rick and Larry thought they could do anything," he says. "That's part of what attracted us."

Awash in the capital Pepsi poured



1970 Flax and Rosenfield become pals while working as prosecutors in the Los Angeles District Attorney's Office.

1973 The pair go into private practice, specializing in tax evasion and other white-collar crimes.

1985 They open California Pizza Kitchen. By 1992, CPK has 25 locations serving barbecue chicken and Thai pizzas.

1992 PepsiCo buys control of CPK, paying a steep 60 times cash flow. Execs call the move "an experiment."

1992-1996 Flax and Rosenfield expand chain to 90 restaurants but poor locations severely depress sales and earnings.

they had struck a great idea: a pasta-bar chain. But they switched to pizza after scouting out an existing eatery. "There was all this fresh pasta, but everyone was grabbing this tired pizza under a hot lamp," says Rosenfield. "We said, 'Let's do pizza.'"

But not just ordinary pizza. Across town, Wolfgang Puck was serving duck-sausage pizzas to rave reviews at his trendy celebrity hangout, Spago. Flax

pizza revenues. So Flax and Rosenfield parted ways with their fancy chef, figuring they could dream up their own new twists. *Voilà*—BLT pizza, eggs Benedict pizza, even burrito pizza.

By the time Pepsi came knocking, Flax and Rosenfield were on a roll. They had long since quit their day jobs as lawyers to devote themselves to the business. And with such chains as Boston Chicken Inc. then bursting on

into CPK, the pair made the classic blunder of overexpansion. They ordered scores of large restaurants built in malls around the country. The result was empty tables in poor locations such as the outskirts of Houston. Concedes Flax: "We exploded our concept by opening way too fast." Adds Stevens: "We wanted to leave them alone...but it turns out they had a gap in their skill set."

To fix the mess, Pepsi sent in Pizza

The strength of any element is not in its might but

But executive Greg Trojan as CPK's new CEO. Pepsi also sought to rein in Flax and Rosenfield by taking over some of CPK's debt in exchange for preferred stock, thereby gaining a third seat on the five-member board. But Flax and Rosenfield, each with their own board seat, declined to go along until PepsiCo promised them the right to refuse any sale of the company until 2001. The deal was struck just two months before PepsiCo decided to shed its restaurant division. "Here we are, just a couple of ants," says Flax. "But

PepsiCo sells back to Flax and Rosenfield for only 10 times low. Pepsi off \$100 million in debt. **1998** CPK will turn a profit for the first time since 1991. Flax and Rosenfield expand into frozen supermarket pizzas.

they had to make a deal that was acceptable to us."

In September, 1997, Flax and Rosenfield approved an offer from venture-capital firm Bruckmann, Rosser, Sherrill Co. to buy the company for under 10 times its cash flow. In the new company, Flax and Rosenfield kept their 25% stake, while Bruckmann holds 67%. That's more, to unload the chain, then taking in \$160 million in sales, Pepsi

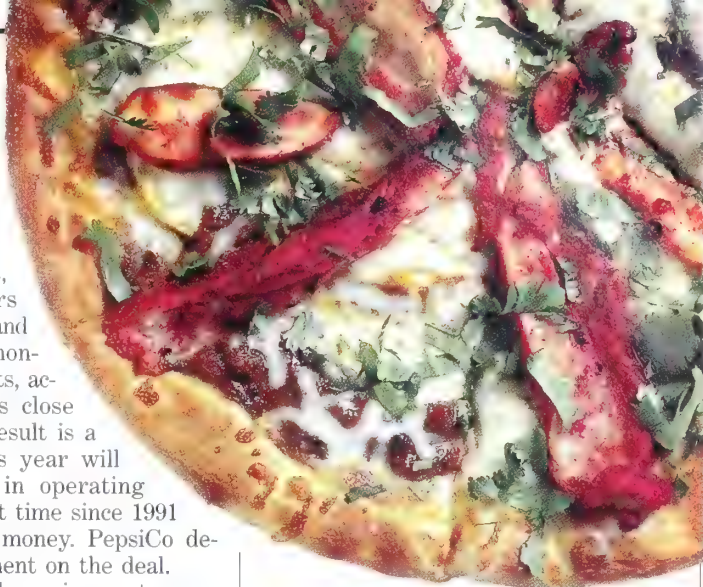
STILL HUNGRY

CPK wants to expand into frozen pizzas

wrote off about \$90 million in debt, paid the founders \$8 million in cash, and closed down 10 money-losing restaurants, according to sources close to the deal. The result is a company that this year will earn \$16 million in operating cash flow—the first time since 1991 that it will make money. PepsiCo declined public comment on the deal.

NO COKE. Now the pair must prove they can manage such a huge chain. So far, they seem to be making the right moves. In January, CPK brought in Frederick Hipp, the longtime CEO of Houlihan's Restaurant Group Inc., as its new CEO. Flax and Rosenfield are still in charge of the menu and promotions. But Hipp has moved swiftly to "clean up the slop" at poorly run outlets.

Rosenfield and Flax, who still have their sights set on adding 15 outlets a year and introducing frozen supermarket pizzas, shrug off concerns they'll over-



expand again. Indeed, Flax boasts of soon taking on another PepsiCo ex-subsidiary. "We always believed we would surpass Pizza Hut," says Flax of the \$4.7 billion chain. "We still believe we will." That's a stretch. But one thing the CPK boys will never do is serve Coke at their restaurants. "We'll serve [Pepsi] forever," says Rosenfield. "We will always be in their debt." Some \$100 million worth, to be exact. Money enough to buy plenty of gratitude.

By Kathleen Morris in Los Angeles

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FOOTBALL

FROM TEARS TO CHEERS IN CLEVELAND

How billionaire Al Lerner bagged the Browns and soothed his angry city

Alfred Lerner is reluctantly playing tour guide, escorting a visitor through his Manhattan office. Even for the billionaire chairman of credit-card issuer MBNA Corp., it's opulent. There's the fine art, the dark-wood paneling and, from the 50th floor, a

There's a bronze bust that Lerner picked up as winner of this year's Horatio Alger Award (previous honorees: Ronald Reagan, Oprah Winfrey, and Hank Aaron); a pint-size edition of MBNA's jet, a green-striped Gulfstream IV in which Lerner logs a quarter-million miles

each year; and a model of a building under construction at Lerner's alma mater, Columbia University. The nameplate reads "Lerner Hall." Says the financier, class of 1955, who is kicking in \$25 million for a student center: "Here's something we're involved with." We? "I say 'we,'" he says matter-of-factly. "I don't say 'I.'"

Any day now, Lerner's collection may be expanding to include a gold-plated chin strap or a marble kicking tee—symbols of his latest and, in many ways, most ambitious undertaking: the purchase of the National Football League's Cleveland Browns franchise. In September, Lerner, a native New Yorker who has lived in a Cleveland suburb for 38 years, snared the expansion team, prevailing over half of Corporate Cleveland in a bidding war that ratcheted the price up to \$530 million.

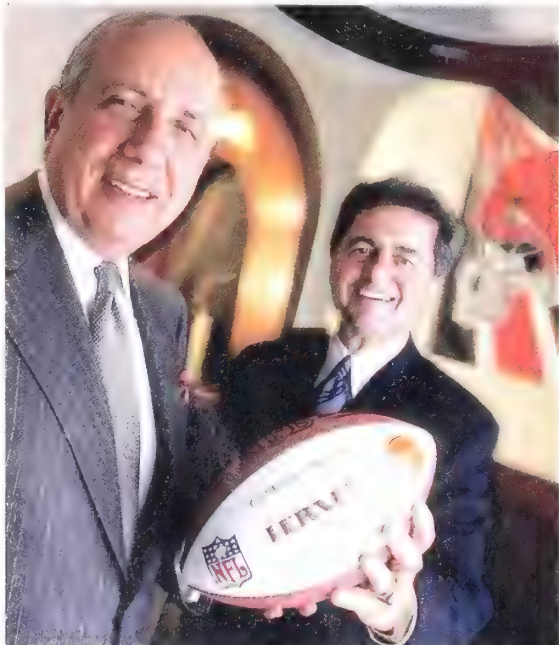
In all, seven investor groups campaigned to own the new Browns—successors to the franchise that skipped town three years ago to become the Baltimore Ravens. Vying for the team were



the fabulously wealthy, in some case paired with the very famous. Lerner's most serious rivals, the Dolan family, who run Cablevision Systems Corp. teamed up with Bill Cosby and NFL coaching legend Don Shula. Cleveland real estate developer Bart Wolstein had Pro Football Hall of Famer Jim Brown running interference.

RECORD SUM. Lerner, whose group includes NFL executive Carmen Policy and Browns ex-quarterback Bernie Kosar, paid the highest price ever for an American sports franchise. It eclipsed the record of \$311 million (Rupert Murdoch's deal for baseball's Los Angeles Dodgers, which included Dodger Stadium). Before that, no one had ever paid more than \$250 million for an NFL team.

The value of pro football franchises has been soaring ever since the NFL



LERNER AND POLICY: The six rivals they outbid included a group led by the Dolans of Cablevision

view of almost every tree in Central Park. The furnishings that Lerner seems most eager to show off, however, are assorted objects that, in miniature, seem to illustrate his life.



WONDER YEARS: JIM BROWN (NO. 12), TEARING UP THE TURF IN 1953—BACK WHEN THE BROWNS WERE HOT

linched its latest network-TV deal last January—\$17.6 billion over eight years. For the new Browns, there are also riches in a stadium rising on the site of the old Cleveland Stadium. Unlike its decrepit forebear, the new facility will be loaded with luxury suites and restaurants. But even with those revenue-generators, most observers agree, the Browns, who will begin play in 1999, aren't likely to turn the sort of operating profits Lerner demands of his other investments. "We'll try very hard to have revenues exceed expenses by as much as possible, but that's not why I'm doing this," says Lerner.

Why, then? Why would Lerner—a self-made billionaire who rose from a 75-a-week job selling furniture, a man who wears only tailored suits and puffs 18 Cuban cigars—fritter away more

than a half-billion dollars on a football team? Simple, says the plainspoken Lerner: He wants to produce the best football team for Cleveland, a city scarred by the move of the original franchise in 1995. That—and he has the money. "To quote my wife," says Lerner, 65, "If it's what you want and you can afford it, do it."

NEUTRON BOMB. Others wonder if his motives are not more complex. Terry Pluto, a columnist for the *Akron Beacon Journal*, says: "I really believe buying the Browns was a way for Al Lerner to get back his honor in the community."

Perhaps honor is too strong a word. But for a man who as chairman of MBNA provides Cleveland with 2,000 jobs and who as a philanthropist has given away so many millions that hospital buildings are named after him, Lerner has taken quite a beating from his hometown.

It started on Nov. 5, 1995, when the equivalent of a neutron bomb fell on Cleveland. Browns owner Art Modell, deeply in debt and unable to wrest a new stadium from the city, announced he was moving the storied franchise to Baltimore. Lerner, Modell's friend of more than 20 years and, at the time, a 5% owner of the Browns, was as close to ground zero as you could get. It was Lerner who introduced Modell to bankers in Baltimore and allowed Modell to meet with Baltimore officials on his plane. When Modell announced his decision at a news conference in Baltimore, it was Lerner who sat on a podium next to Modell's son David, shoulder to shoulder with gleeful Maryland dignitaries. The footage was played over and over on the Cleveland evening news. "In hindsight, it wasn't brilliant," Lerner says of his seat-

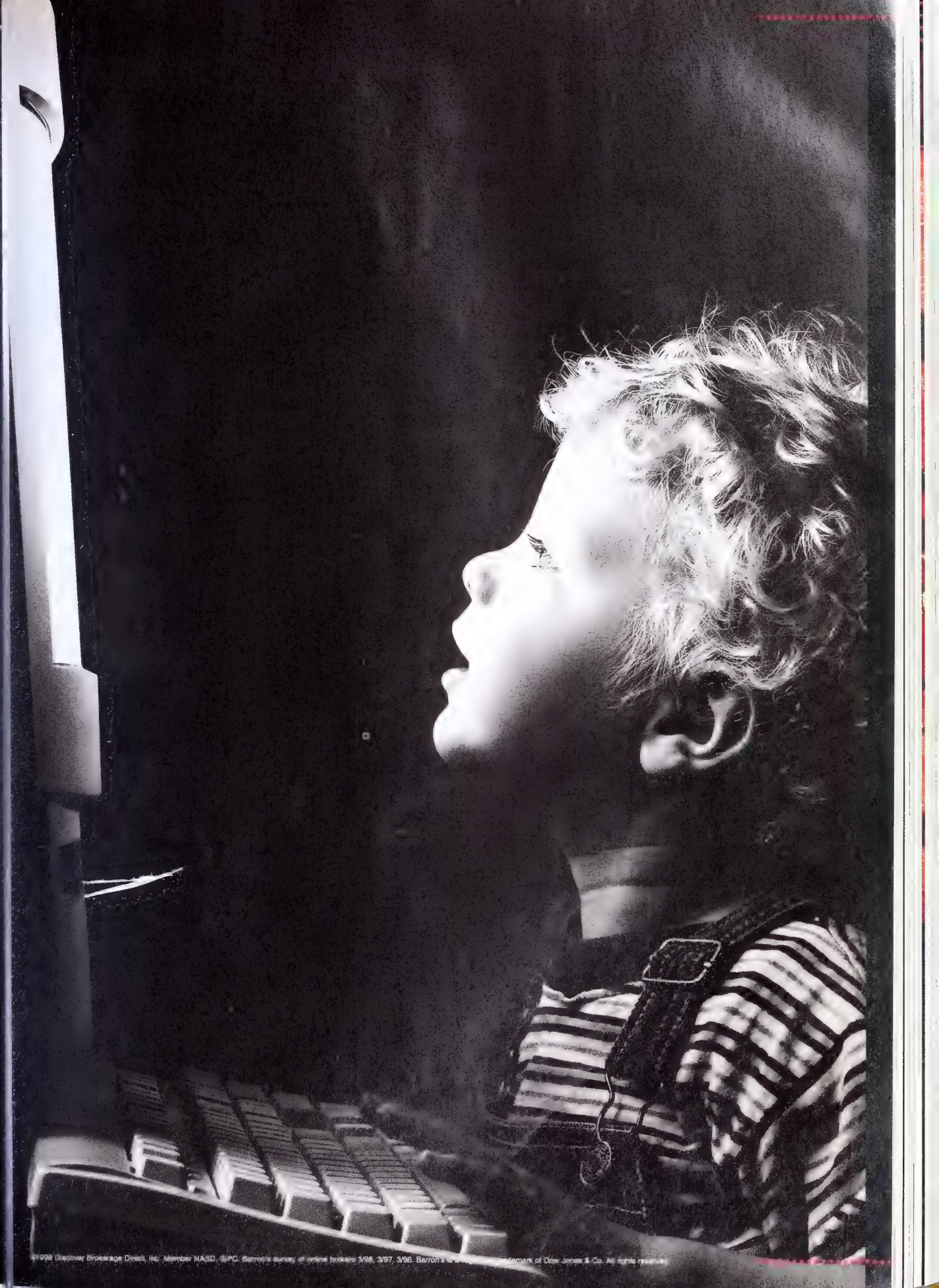
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After Lerner's bid was announced, protesters mistakenly showed up at the home of Al Lerner, the neurologist

ing choice that day. "In hindsight, it was dumb."

Most of the outrage was directed at the Modell. A protest in Cleveland drew nearly 10,000 fans. In a macabre display, a radio talk-show host led a rally at which effigies of Art and David were hanged, electrocuted, and flung into a crowd that dismembered them. The Modell was Public Enemies No. 1, and Lerner was on the most-wanted list, too. "If you're Al Lerner, and you feel that strongly about the Browns not moving, you just tell Art, 'Fine, move on your own.' You don't give him your plane. You don't sit there while the deal is signed. You don't sit there on the podium the day the deal is announced. I think Al Lerner was shocked at the backlash against him," says Pluto, author of *When All the World Was Browns Town*, a team memoir.

EX-FRIENDS. Columnists assailed Lerner for aiding Modell, and some MBNA customers—Lerner estimates fewer than 100—turned in their credit cards. There were reports that Lerner was traveling with a bodyguard and had bulletproof glass in his Mercedes. "I never had a bodyguard in my life," scoffs Lerner. (As for the windows, he says he does occasionally ride in MBNA security vehicles.) Even so, Lerner insists that the ill feelings have now "dissipated permanently."

Maybe. But in August, after Lerner went public with his bid for the new Browns, about 10 fans showed up at the house of Al Lerner for a protest. The demonstration broke up when it was discovered they were at the house of Al Lerner, the neurologist.

The Browns' move also cost Lerner his decades-old friendship with Modell. The two had become partners when they bought radio stations together in 1976. After Modell underwent heart surgery in 1983, Lerner began ferrying his buddy to the Browns' road games in his jet.

By 1986, Lerner was a Browns investor. And as Modell's money problems worsened, he came to rely on Lerner as a confidant and financial guru.

But beginning on the day the deal with Baltimore was announced, the friendship turned icy. Three years later, Modell refuses to speak about Lerner. Modell declined to be interviewed for

It's wrong to say I walked on Art. Art thinks it, he's wrong. If Moag thinks it, he's wrong....Never happened." suggestions that he helped Modell decide to move the team, Lerner again bristles: "There was never a time that Art or anyone else said to me, 'What do you think we should do?' No one asked that question... What I did was to

support Art. What I did was not bail out. What I did was not run away and not abandon him at the difficult time. What I did was what I *didn't* do."

Nowadays, Lerner and Modell speak only when they must. In the summer of '97, they met at NFL offices in New York to finalize the buyout of Lerner's interest in the Brown-turned-Ravens. Modell paid Lerner \$32 million for his stake, which had grown to 9%. Lerner says Modell proposed the figure, and he accepted with "zero negotiations."

In September, Modell played a small role in delivering the new Browns to Lerner. Meeting in Chicago to choose an owner for the franchise, representatives of the 30 NFL teams deadlocked. After three ballots, Lerner had 21 votes, one shy of the three-quarters needed with seven owners—including Modell—supporting the Dolan group. Modell then addressed the owners and "for the good of the league" called for a unanimous vote in favor

Lerner. The next vote was 29-0 (Al Davis of the Oakland Raiders abstained). For those who know both Lerner and Modell have little hope of a reconciliation. Lerner is philosophical. Without naming Modell, he says, wistfully: "People tend to stay angry a lot longer than they stay appreciative."

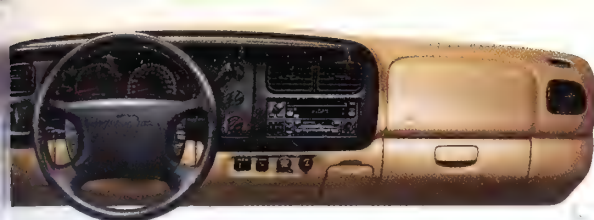
Certainly, Lerner has reason to be appreciative. The only child of Russian immigrants who ran a candy store and sandwich counter, first in Brooklyn and then in Queens, Lerner is now worth \$2.8 billion—a number he ca



OUTRAGE: The Baltimore deal made the Modells Public Enemies

this story. "To see his best friend walk on him after helping him negotiate the deal was such an intense blow," John Moag, chairman of the Maryland Stadium Authority and a friend of Modell, told the *Cleveland Plain Dealer* in September. Moag later protested that his comments were off the record, but he does not deny making them.

Lerner doesn't take such criticism lightly. Says Lerner of Moag's comments: "Everything he says there is wrong.... It's wrong to say I negotiated the deal. There was nothing to negotiate.



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Carmen Policy—caught in a firefight between the warring DeBartolos—was eager to leave the 49ers

"scary." The family lived in three rooms behind the store, with Lerner's parents sleeping on a pullout sofa. Store hours were 6 a.m. to midnight, Lerner recalls, with three days off a year for Jewish holidays. When a reporter inquires about the layout, Lerner grabs a pad and sketches, relishing the chance. "Over here was a soda fountain with maybe six stools. I'd usually eat dinner at this last stool," he says. "Over there was the counter. You know, cigars, cigarettes, candy. And back here were two phone booths—we never had our own telephone—so if I wanted to make a call, I'd stand on a soda box and put in a nickel."

Spurred on by his parents, Lerner attended Brooklyn Technical High School. After turning down a scholarship to Massachusetts Institute of Technology, he enrolled at Columbia, where he now serves as vice-chairman of the university's board of trustees (NBA Commissioner David Stern is also a vice-chairman). After graduating, Lerner married his college sweetheart, Norma, who has been

his wife for 43 years, and shortly thereafter joined the Marines for a two-year stint as a pilot.

When he left the service, Lerner took a pay cut to become a salesman for Broyhill Furniture, working first in New York, then Baltimore, and finally Cleveland. To escape life on the road, Lerner switched careers, first to real estate, then banking and financial services. His first venture was an apartment building outside Cleveland, which he bought with several partners. They formed a real estate investment company and later a mortgage company that made lucrative loans on investment properties.

By 1981, Lerner was playing in the big leagues. He paid \$29.5 million for a 27% stake in Equitable Bankcorp., which flourished. Eight years later, Equitable merged with MNC Financial Inc., corporate parent of Maryland National Bank. MNC was drowning in bad real estate

loans, a situation so dire that bank officials feared a takeover by regulators. Lerner put the bank's profitable credit-card division on the auction block, offering it for \$1.1 billion. When no buyers stepped up, Lerner took it public as MBNA Corp. in 1991.

MBNA transformed Lerner from a millionaire into a billionaire. Under the leadership of Lerner and Charles M. Cawley, MBNA's president, the company's earnings have increased 20% or more for each of the past five years. In the

pursuing teams off and on for more than a decade. This year, as investor group vied for the Browns franchise, Lerner—to the surprise of many—stayed out of the fray. He told friends there was no need for him to get involved, that bidders already in the game seem qualified. He appeared so resolute that Lerner's Cleveland banker backed another group.

LUCKY CALL. Lerner might have stayed on the sidelines if a friend hadn't called in early July and suggested he hook up with Carmen Policy and consider a bid.

Lerner had met Policy, the longtime president of the San Francisco 49ers, once before and agreed to chat with him. For his part, Policy was keenly interested in cutting his ties with the 49ers. Team owners Edward J. DeBartolo Jr., facing a federal indictment and his sister, Denise DeBartolo York, were fighting for control of the Niners (BW Aug. 17), and Policy found himself caught in the middle.

Policy called Lerner, then flew to New York to continue the conversation. On July 20, they met at Lerner's



FIREWORKS AT CAMDEN YARDS: Lerner got \$32 million for his Ravens stake

process, Lerner's initial \$100 million investment has grown to more than \$1 billion. He now holds some 65 million shares in MBNA, for about a 13% stake in the largest independent credit-card issuer in the world. Lerner also is chairman of Town & Country Trust, a Baltimore real estate trust that owns and manages 14,000 apartments in the Mid-Atlantic States. He owns 1 million shares, or roughly 6% of the trust.

"The most tangible thing about [being a billionaire] is that you can give away an awful lot of money," Lerner says. Last year, Lerner and his wife pledged \$16 million to a cancer and heart disease research center at the Cleveland Clinic. The Lerner family also is making a \$10 million gift to University Hospitals of Cleveland. Being a billionaire also means you can buy a football franchise.

While Lerner says that's never been one of his top priorities, he has been

er's office at 11 a.m. and started talking—all the way through lunch and dinner. Fifteen hours later, they all but had a deal. "I became convinced that with Carmen running the franchise, Cleveland would have the best shot at having a successful team. And the only way he'd do it was if I did it," says Lerner.

Under their agreement, Lerner owns 90% of the franchise. Policy gets 10% and runs it. As the Browns new president, Policy is building an organization from the ground up: The team has no general manager and no coach, and is yet to sign a single player. It also hasn't owner who insists that he wants no input in football decisions. Even on matters vital as picking a quarterback, Lerner says he won't be heard from. "It would scare me that they might pay attention to what I'd say," he says, smoke curling from his cigar. "That would be crazy."

By Mark Hyman in New York



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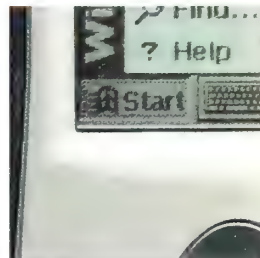
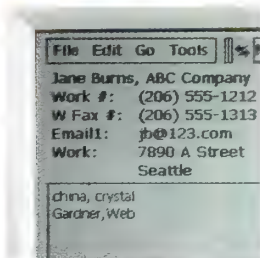
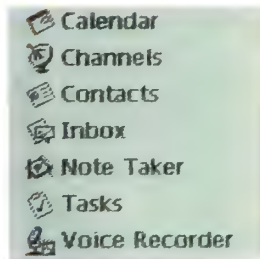


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EDITED BY CATHERINE ARNST

UNMADE T-CELLS D THE ASSAULT AIDS

AIDS AND OTHER CHRONIC diseases that attack the immune system, researchers have long hunted for a way to reinforce the body's defense mechanisms. But efforts to artificially create more of disease-fighting T-cells and in the blood have fallen short: Not enough were created to do much good, and they soon lost their ability to fight specific viruses and tumors. Now, immunologists at the Hutchinson Cancer Research Center in Seattle have figured out how to grow billions of highly specific T-cells in the lab and then use them to augment the immune system—an approach called adoptive immunotherapy.

Dr. Stanley R. Riddell and Philip D. Greenberg of the Hutchinson Center call their technique the rapid-expansion method and have licensed it to Targeted Genetics Corp. in Seattle. They isolate a certain type of T-cell from a few teaspoons of a patient's blood and induce the cells to multiply with the same chemicals that boost the immune system. In less than two weeks, the population multiplies into billions, and when the T-cells are transfused back into the patient, they attack only the diseased cells. Riddell says that the manufactured T-cells function just like their natural counterparts and remain active for at least several months. Although trials have yet to show whether the treatment works better than current treatments for AIDS, it is a promising advance that could make immunotherapy more feasible," says Dr. Peter Boehrly of St. Jude's Children's Hospital in Memphis, a three-time prize winner for his work on the immune system.

Ellen Licking

WHAT TIREMAKERS CAN LEARN FROM FROGS

THE NEXT TIME YOUR TIRES SKID ON A RAINY DAY, THINK of the tree frog. A Scottish zoologist suggests that the frog's intricately patterned toe pads, which allow it to stick to branches in almost any kind of weather, are a guide to improved tire traction. University of Glasgow researcher W. Jon Barnes measured the abilities of 14 different species of Trinidadian tree frogs to stick to a glass surface as they were



gradually turned upside down. He then correlated the angle of the glass when they fell off to their weight and the area of their toe pads. To Barnes's surprise, the heavier frogs hung on longer than expected and had two times as much adhesive force as some of the lighter animals.

The toe pads of all tree frogs contain a hexagonal arrangement of grooves that spread a viscous, sticky substance. But the pads of the heavier frogs are far more complex, with larger grooves and extra mucous pores—a good model, Barnes says, for better tire tread. D. Edward Covert, a senior industrial designer at Goodyear Tire & Rubber Co., says he would be willing to listen: "Goodyear doesn't ignore any reasonable hypothesis when it comes to a new tire design."

Ellen Licking

AN OZONE-FRIENDLY WAY TO KEEP COOL

EVER SINCE MOST OF THE world's nations agreed a decade ago to phase out the ozone-destroying chlorofluorocarbons (CFCs) widely used in refrigerators and air conditioners, chemists have been hunting for a benign replacement. Many potential alternatives also eat away at the earth's protective ozone layer—though at lesser rates than CFCs—and are costly. But the latest candidate is cheap, abundant, and harmless: carbon dioxide (CO₂), a natural component of air.

Compressed CO₂ has been used to cool perishables on ships for decades, but the units were much too large for consumer applications. Now, Hydro Aluminium, a unit of

Norway's Norsk Hydro, has developed a CO₂ A/C system small enough for cars by putting the gas under high pressure. Researchers at the University of Illinois' Air Conditioning & Refrigeration Center in Urbana tested it against a commercial car system with R134a, a CFC replacement that may still contribute to global warming. In the face-off, says Center Director Clark W. Bullard, the R134a system was more efficient at high temperatures, but the CO₂ unit did a better job under other conditions, earning a higher rating overall.

Still, putting CO₂ under high pressure can be dangerous, warns David Zietlow, a Ford Motor Co. consultant. So Ford hopes to develop a low-pressure CO₂ system as well as a high-pressure one.

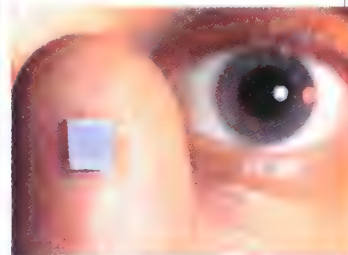
Nellie Andreeva

400 TINY NEEDLES —AND THEY DON'T HURT A BIT

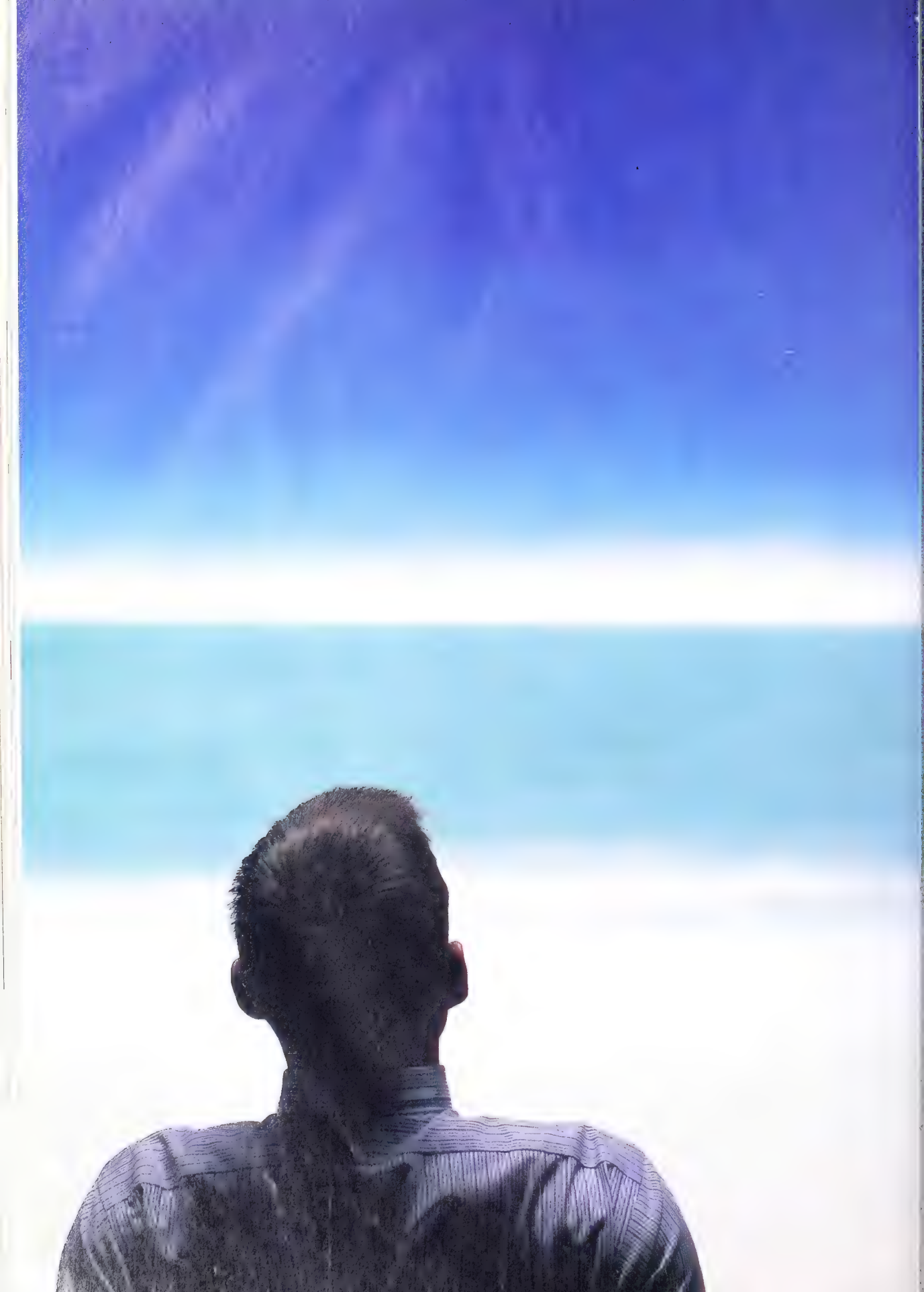
VISITS TO THE DOCTOR MIGHT get a little less painful in the future, thanks to a team of researchers at Georgia Institute of Technology in Atlanta. They are trimming the pain by shrinking the needles—to less than the diameter of a human hair. Instead of one big needle, there are 400 tiny ones, each 150 microns long, set into a pinhead-size silicon chip. The team produced the microneedles with silicon-etching techniques originally developed for making integrated circuits.

The chip could be used like transdermal patches commonly used for weaning smokers off tobacco, says Mark R. Prausnitz, assistant professor of chemical engineering and leader of the research team. The patient would stick the chip on the surface of the skin, where there are no nerve endings, and the needles would deliver the drug to the next layer of skin, where it would be absorbed into the bloodstream—no pain, no mess.

Another potential benefit: Those small holes may soon



get too tiny for bacteria to enter the skin. Dr. John C. Ansel, a dermatology professor at Emory University School of Medicine in Atlanta, says the microneedle technology has great potential: "The fact that it is virtually painless and does not pose a significant risk for infection is a major advance." Nobody will argue with that. □



What, exactly,
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ANNUAL TECHNOLOGY BUYING GUIDE

Handhelds page 128

Palm-size PCs and E-books are looking better all the time, but finding the right one means making trade-offs

Laptops page 140

As choices proliferate, there's a portable PC and organizer for every budget

Desktops page 148

It's bargains everywhere—from starter PCs to laser printers, flat-panel monitors to eye-popping iMacs

Wireless page 164

It's the extras that count—as phone outfits vie with each other to offer their users distinctive services

Cyberspace page 172

Working the Web takes help. Luckily, concierges and virtual assistants are at your service

BusinessWeek **ONLINE**

You'll find lots more info, including additional stories on computer gear and Internet technologies, and reviews of helpful Web sites. Just go to www.businessweek.com



"Wildfire, I'm depressed."

"Oh, you poor thing. Would you like me to call somebody who cares?"

You probably never expected to have a conversation like this with a machine. But every day, a few thousand cell-phone-toting executives in America are talking with a personal-assistant service known as Wildfire Communications Inc.

Believe it or not, it's actually a computer you can call up that uses an irreverent woman's voice to communicate. Call out her name while driving in your car, and she'll set up a phone call, play back your voicemail, or route incoming calls to the front desk at your hotel. Offered as a feature on some wireless services, Wildfire can cost as little as \$15 a month.

Automated messaging isn't the only hip stocking-stuffer for mobile executives this Christmas. This is the year when small is not only beautiful but also powerful—whether it's a machine that sits on your desktop or fits in the palm of your hand. And oh, what

the World Wide Web hath wrought: vast libraries of information and scores of digital bazaars at your fingertips in a world that, finally, is beginning to let you roam free, or at least out of the office.

Looking for tools that make life on the go easier? You might need a service offered by a wireless carrier called Omnipoint Corp. that lets you use the same cell phone in 38 countries, including the U.S. Or if you just want to download lists from your PC, there's a credit-card-size gadget called Rex that costs \$210.

Step up to notebook computers, and some real wonders unfold. Sample Apple Computer Inc.'s new PowerBook G3, whose lustrous screen holds its own against desktop monitors. Need hard copy? Canon Inc. has a \$349 printer the size of a cigarette carton that doubles as a scanner.

Even if you're up to your teraflops in technology, you'll find the BUSINESS WEEK Buying Guide useful. It offers a wonders-and-warts evaluation of everything from digital books to helpful Web sites. So savor the sheer capacity these tools place at your fingertips.

ANNUAL BUYING GUIDE

EXECUTIVE POWER TOOLS





A PC FOR EVERY POCKET

Today's wide range of sizes and features means there's one that's right for you

When Bruce Whitehead needs to check a phone number or an appointment, whether in his Dallas investment-banking office or at his ranch 85 miles south of town, all he has to do is whip his REX-3 out of his pocket. The tiny credit-card-size gizmo from Franklin Electronic Publishers Inc. provides a handy readout of Whitehead's address book and schedule on an easy-to-read screen—and REX's sealed design makes it impervious to the dust and grit of a Texas ranch.

Whitehead, a principal in BritWill Investments, a private investment company that takes equity stakes in assorted businesses, has surveyed the field of handheld computers. He has been using them since the early '90s when he bought one of the earliest models, a Hewlett-Packard Co. 95LX. He moved up to the 200LX but eventually abandoned the DOS-based handheld when it became too hard to make it work with the Win-

Bruce Whitehead

ULTIMATE SIMPLICITY

After surveying the field, the Dallas-based investor picked the credit-card-size REX-3. Its sealed design makes it impervious to the dust of a Texas ranch



ws programs he uses on his top PC. He tried one of the st handhelds based on Microsoft Corp.'s Windows CE operating system, an HP 360LX, t it was too big and gob- d up battery life. After re- ting even the diminutive mPilot as too bulky, White- ad settled on the \$100 REX. wanted something I could ek in my pocket for a week a time," he says.

Like most owners of hand- d devices, Whitehead uses as a PC accessory. He eps his calendar and con- t information in Microsoft ook on a Toshiba Corp. top. At regular intervals, pops the REX into a PC d slot in the laptop and, ng Puma IntelliSync soft- re, downloads the data.

Whitehead's REX is just for ding information, though newer REX Pro will let enter data, too—but with egree of difficulty. He sn't miss the ability to en- information on the fly: "I ce paper notes of what I t to enter into the com- er." He types it into the hiba, then downloads it to REX.

he REX is the ultimate in plicity, but it represents one end of a spectrum andheld computers that ges on up to the newest dheld PC Professionals ; run a version of Mi- oft Windows, cost \$1,000, offer displays that are t inches or bigger.

he PalmPilot (\$240) and n III (\$350) from 3Com , remain the kings of the dheld heap, with more .2 million sold—far more all other handhelds com- d—and for good reason. a products are designed o relatively few things, so o do them well. Although ers and third-party soft- e developers have pushed Palms well beyond their mers' intentions, the vast erty of owners stick with uilt-in programs and use ' palmtops to carry d contact lists, calendars, to-do lists.

though much bigger— bulki-er—than the REX, 3-ounce Palm fits easily a pocket or purse. And

In the Palm of Your Hand

MODEL AND PRICE	MEMORY, DISPLAY, WEIGHT, AND BATTERY LIFE	THE SKINNY
REX PRO , Franklin Electronic Publishers \$210	512 Kb; 160x98 monochrome; .09 lb.; and two CR2025 batteries that could last 6 months.	All your contact and calendar information in a credit-card-size package. Very difficult data entry makes this effectively a read-only device.
PALM III , 3Com \$350	2 Mb; 160x160 monochrome, touch-sensitive; 4 lb.; and two AAA batteries lasting about 6 weeks	The king of the handhelds, with good reason. Simple, easy-to-use design more than compensates for mediocre display.
NINO 300 , Philips Mobile Computing \$349	4Mb; 7.8 oz.; 240x320 grayscale, touch-sensitive; and 10–12 hr.	Sleek design, but bulky for a palmtop.
CASSIOPEIA E-11 , Casio \$390	8 Mb; 6.5 oz.; 240x320 grayscale, touch-sensitive; and 20 hr. on two AAA batteries	Convenient small size, but relatively dim screen makes the complex Windows interface difficult.

ALL PALM-SIZED PCS, EXCLUDING THE REX PRO AND THE PALM, INCLUDE CALENDAR AND CONTACT SOFTWARE, E-MAIL, VOICE RECORDER, WEB BROWSER

Bigger Than the Palm of Your Hand

MODEL AND PRICE	MEMORY, DISPLAY, WEIGHT, AND BATTERY LIFE	THE SKINNY
VELO 500 , Philips Mobile Computing \$500	16 Mb; 6.25 in. diag.; 640x240 grayscale, touch sensitive; 0.9 lb.; and 15 hr.	The smallest and lightest of the Windows CE devices. Handy voice recorder. But small keyboard makes typing difficult.
660LX , Hewlett-Packard \$900	32 Mb; 6.5 in.; 640x240 color, touch sensitive; 1.3 lb.; and sensitive; 1.3 lb.; and and 15 hr.	Good mid-size unit, but lacks internal modem. Built-in software to exchange data with REX.
MOBILEPRO 750C , NEC Computer Systems \$700	16 Mb; 8 in. color, 640 x 480, touch sensitive; 1.9 lb.; and 8 hr.	A real typewriter-style keyboard, with keys only a bit smaller than standard, makes touch-typing possible.

ALL THESE HANDHELD PCS COME WITH THE WINDOWS CE 2.0 OPERATING SYSTEM, WHICH INCLUDES POCKET WORD, POCKET EXCEL, POCKET INTERNET EXPLORER, AND E-MAIL

Practically Laptops

MODEL AND PRICE	MEMORY, DISPLAY, WEIGHT, AND BATTERY LIFE	THE SKINNY
CLIO, VADEM* TRIPAD , Sharp Electronics \$999	16 Mb; 9.4 in. color, 640x480 touch-sensitive; 3.2 lb.; and 12 hr.	Unique pivoting screen design allows the Clio/Tri Pad to be to be used as a conventional notebook, a presentation unit, or a tablet. Built-in handwriting-recognition software.
JORNADA 820 , Hewlett-Packard \$999	16 Mb; 8.2 in. color, 640x480, 2.5 lb.; and 10 hr.	The lightest of the HPC Pros. Uses laptop-style touchpad instead of stylus and touch-sensitive screen.
MOBILON PRO , Sharp Electronics \$900	16 Mb; 8.2 in.; 640x480, touch-sensitive; 2.7 lb.; and 8 hr.	The least expensive of the HPC Pro models. Conventional design like the Jornada, but uses stylus and touch screen instead of touch pad.

ALL HPC PRO MODELS USE THE WINDOWS CE 3.0 OPERATING SYSTEM, WHICH INCLUDES POCKET WORD, POCKET EXCEL, POCKET POWERPOINT, POCKET EXCESS, POCKET INTERNET EXPLORER, AND POCKET OUTLOOK

DATA MANUFACTURERS' BUSINESS WEEK

*VADEM MANUFACTURES THE SHARP TRIPAD

unlike the REX, entering data is easy once you learn a special alphabet called Graffiti. Drop the Palm into a cradle, press a button, and its data files quickly update information using a variety of Windows and Macintosh contact-management software. While the 160x160 pixel screen leaves something to be desired, especially in poor light, the Palm

will run for weeks on a pair of AAA batteries.

The Palm's success was bound to attract competition, and it has—in the form of the Windows CE-powered Palm-size PCs (an unfortunate name chosen after 3Com sued to stop Microsoft from using its first choice, the Palm PC). Contenders include the Philips Nino and the Casio Cassiopeia E-11. These

are larger than the Palm, especially the Nino; offer higher-resolution screens; and provide somewhat easier data entry, also using a Graffiti-like shorthand. Nifty features include a built-in recorder for voice messages.

The Palm-size PCs also come with some big negatives: The user interface, a variant of Windows, complete with a start button, is crowd-

ed, fussy, and difficult to navigate on the small display. The software is sluggish, and you'll spend some time staring at the Windows houseglass. Batteries last days rather than weeks. Making sure all your files are up to date with your desktop is more complicated than with Palm and works only on computers running Windows 95, 98, or NT.

BIG BOYS. If you want a superlightweight device with the flavor of Windows, you would probably do better step up to a Windows Handheld PC (HPC). They come in a wide variety of styles, ranging from designs that you can slip into a pocket (if you have big pockets) to the newest HPC Professional models that are more suitable for holding on your lap than in your hand.

Even among the small HPCs, there's a considerable range of size, price, and capability. The most compact version is the Velo 500 (\$599 from Philips Mobile Computing Group). The Velo, which weighs less than a pound, has a monochrome screen. The lack of color is a handicap working with the Windows-style screens because without color, it can be hard to distinguish among the icons. You navigate through the displays by using a stylus to select icons and menu items, the touch-sensitive screens. Like most of the HPCs, Velo's calculator-style keys are unsuited to touch-typing, and data entry is probably best kept to short E-mail messages.

There is also an assortment of slightly larger HPCs with color displays and rechargeable batteries that typically last 8 to 10 hours and cost around \$800. They include the HP 660LX and Sharp Mobilon HC-4500. Color makes using Windows much easier and improves the readability of the display, especially in dim light.

Finally, there are a couple

POWER USER

Reading the Palm

When the folks at Palm Computing designed the Palm in 1995, they saw it as an easy way for people to get contact and schedule information into a handheld device. They didn't reckon with customers like Jeff Boly.

Boly, a systems engineer at Santa Clara (Calif.) networking-equipment maker Auspex Systems Inc., uses his Palm III to do everything from keeping track of split times in a 192-mile relay footrace from Mt. Hood to Portland, Ore., to fetching E-mail while traveling in Europe last summer. Boly uses a range of commercial, shareware, and freeware programs (page 138). But when he wants something that doesn't exist, such as the relay-tracking program, he just writes it himself.

NO GLITZ. Not everyone can do that, of course, but there are plenty of ways a nonprogrammer can get the Palm to handle all manner of tasks. Boly, for example, keeps price and part numbers for Auspex' server products on his desktop PC, then downloads it into his Palm so he has the data when he visits customers. When traveling, he snaps on a modem and uses his Palm for E-mail and browsing the Web.

Boly's first handheld experience was with the Hewlett-Packard 100LX, but he gave up on it because it didn't offer desktop synchronization. "I went for the Palm



TRACKING RELAYS: *Boly just creates the programs he needs*

because I saw the Macintosh-like features that I really like," he says. "It wasn't just another Windows machine. There are a lot of third-party applications. And it doesn't have a lot of the glitzy features that use up battery life."

Boly's experience sums up two reasons why the Palm has been so successful while other handhelds have struggled to win acceptance: First, the Palm's design is limited to what works simply and well. Second, the availability of excellent software-development tools and the encouragement of outside programmers means that a broad range of specialized programs is available. Boly shows that it's a winning combination.

By Stephen H. Wildstrom

TIP: To avoid data loss, change Palm batteries before they get too low

Canon's Breakthrough Technology Maximizes Your Projector's Output.

Unretouched image of the area below President Grant's beard on a \$50 bill, taken with Canon's DZ-3600U.

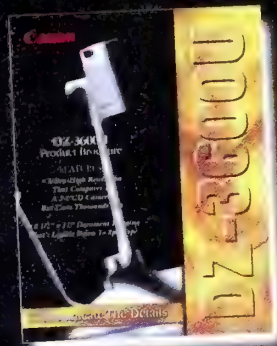
Our New Digital Document Camera Revolutionizes Presentations With Exceptional Price/Performance.

In a matter of seconds, Canon's DZ-3600U can capture a high resolution digital image (1900 x 1424 pixels) from a critical chart, spread sheet, entire 8 1/2" x 11" document (legible to 8 pt. type), 3-D object or 35-mm slide; for quick integration into your presentation. Now, projector users can maximize their high resolution output, while displaying image quality and detail that compares to a 3-CCD camera.

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high-resolution, detail-sensitive imaging affordable, by making one CCD do the work of nine. Intricate details, invisible to the naked eye, (1600x zoom magnification) are captured and displayed to the back row (without constantly zooming in), or transmitted across your network anywhere in the world.

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ple of still-larger HPCS, the NEC MobilePro 750C and LG Electronics Inc.'s Phenom Express (\$800-\$900), which use larger keyboards with real keys. Although the keyboards are cramped, it is possible to touch-type on them if you're careful.

HPCS come with a broad

range of software built in, including slimmed-down versions of Microsoft Word and Excel, PowerPoint, the Internet Express browser, and an E-mail program. Built-in modems let you communicate via the Net or corporate networks with dial-in access.

The snag is that the E-mail software just isn't very good. The biggest problem is the inability to read files attached to messages. Pocket Word, for example, can't open an attachment saved in the regular Word format. In corporate settings, where Word and Excel attachments

fly fast and furious, this can be a crippling shortcoming.

John Weigel, an information-systems executive for Andersen Corp. in Bayport, Minn., rarely uses his P660LX for mail. But he finds it handy for carrying around the contact and calendar information that he keeps

ELECTRONIC BOOKS

A Library On Your Lap

So you think you're a beast of burden in the Information Age, hauling around briefcases jammed with reports, binders, and magazines. Do your shoulders ache from the strap on your stuffed briefcase? Is your spine totally out of alignment?

Lighten up. Electronic books may soon deliver you from your paper weight—and all those trips to the chiropractor. Ranging in size and poundage from a waterlogged paperback to a 3-pound legal pad, E-books share one salient trait—they can hold up to 4,000 pages, or about 10 books' worth of text, in a memory made of silicon. That should keep even power readers busy on the commute home. Once you've knocked off the Federal Spending Bill, delete it and load the complete works of William Shakespeare, via dial-up modem or PC.

Sounds revolutionary—and it is. But the companies leading the charge have remained faithful to at least some traits of ordinary books.



By clicking a switch, users can move forward or backward one page at a time. Touch-sensitive screens make it possible to write notes with a stylus in the margin of some digital books, such as the Rocket eBook (NuvoMedia Inc.) and SoftBook (SoftBook

Press Inc.). The Everybook (Everybook Inc.) trumpets a design with dual screens to mimic the look of a traditional book. But the cost—\$1,500—will price it far above other E-books when it ships next April.

PIPE DREAM. Still, users are constantly reminded that this is less a book than a user-friendly incarnation of a laptop. The tablet-like displays won't approach the clear resolution of ink on a page for many years to come, and color remains a pipe dream. Then there's battery life, which ranges from around 4 hours for the SoftBook to 9 hours for the Rocket eBook and Millennium e-Book (Librius Inc.). It's also not clear what E-book users will be charged for individual titles. Near-term, though, don't expect to pay less than you would for a paperback.

Too bad the tale of E-book makers isn't in digital form. Then you could click to the end of the story to find out how all the conflicts are resolved.

By Paul C. Judge in Boston

Digital Books Are Just Around the Corner

PRODUCT (MAKER)	PRICE/AVAIL.	FEATURES	PUBLISHING PARTNERS
EVERYBOOK (Everybook Inc.)	\$1,500/ Apr. '99	Two-color screens give the look and feel of a traditional book	McGraw-Hill, Rodale Press, Cambridge Univ. Press*
MILLENNIUM eBOOK (Librius Inc.)	Under \$200/ Jan. '99	Paperback-sized	None yet
ROCKET eBOOK (Nuvo Media Inc.)	\$499/ mid-Nov.	Paperback-sized	Simon & Schuster, Random House, HarperCollins, Penguin Putnam
SOFTBOOK (Softbook Press Inc.)	\$599/ late-Nov.	Legal pad-sized screen	In talks with Simon & Schuster, Random House, HarperCollins

* For testing only—no signed partnerships

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 **e-business tools**



Microsoft Outlook on his desktop. Still, Weigel would like to see better applications programs and a better mail solution. "That would make it a true corporate citizen," he says.

Significant software improvements are coming in the next version of Windows CE, though upgrading older units will require replacing a module containing the read-only memory chips. For now, however, the only way to get the new and improved CE is by buying one of a new class of handhelds that are much more laptop-like.

TOUCH AND GO. The first of these new models—the Sharp Mobilon Pro (\$900); the Vadem Clio, also sold as the Sharp TriPad (\$1,000); the HP Jornada 820 (due out in November); and the NEC MobilePro 800 (set for release in late winter)—sport whizzy designs and pose a challenge to low-end Windows 98 laptop computers.

The Mobilon, Jornada, and MobilePro resemble somewhat shrunk laptops. They weigh in at under 3 pounds—about the same as mini-laptops—and feature nearly full-size keyboards. The Mobilon and Jornada have passive-matrix color displays measuring a bit more than 8 inches on the diagonal.

But they part ways in one important respect: The Jornada uses a conventional laptop-style touch pad for screen navigation, while the Mobilon borrows the touch screen and stylus used in the smaller Windows CE products. Although Jornada's design forces the touch pad to be a lot smaller than what you would find in a laptop, it is easier to use than a stylus in this laptop-like design. Clicking the buttons on the touch pad feels a lot more natural than tapping the screen. And not having to make the screen touch-sensitive allows for a slightly crisper and

more contrasty display.

The Clio/TriPad takes a different, and altogether novel, approach. Instead of the screen being attached to the keyboard base with a rigid hinge, the display pivots on two aluminum arms that

some major improvements for this new class of handhelds. The larger screens support displays of as much as 640x480 pixels, compared with a maximum of 640x240 on older versions, allowing twice as much information to

to your desk will be exactly the same. This makes much easier to manage mail account using different computers. For now, this feature is available only with these handhelds. If you decide to purchase another



THREE IN ONE

The Clio can be a conventional notebook, a display for presentations, or a writing tablet

swing up from the back of the base. This allows the unit to be used in three different modes: as a more-or-less conventional notebook, in a presentation setup with the display flipped over, and with the display folded flat over the keyboard for use as a 9.4-inch tablet. In tablet mode, where the keyboard is inaccessible, the Clio automatically runs Vadem's Calligrapher handwriting-recognition software.

Windows CE 2.11 offers

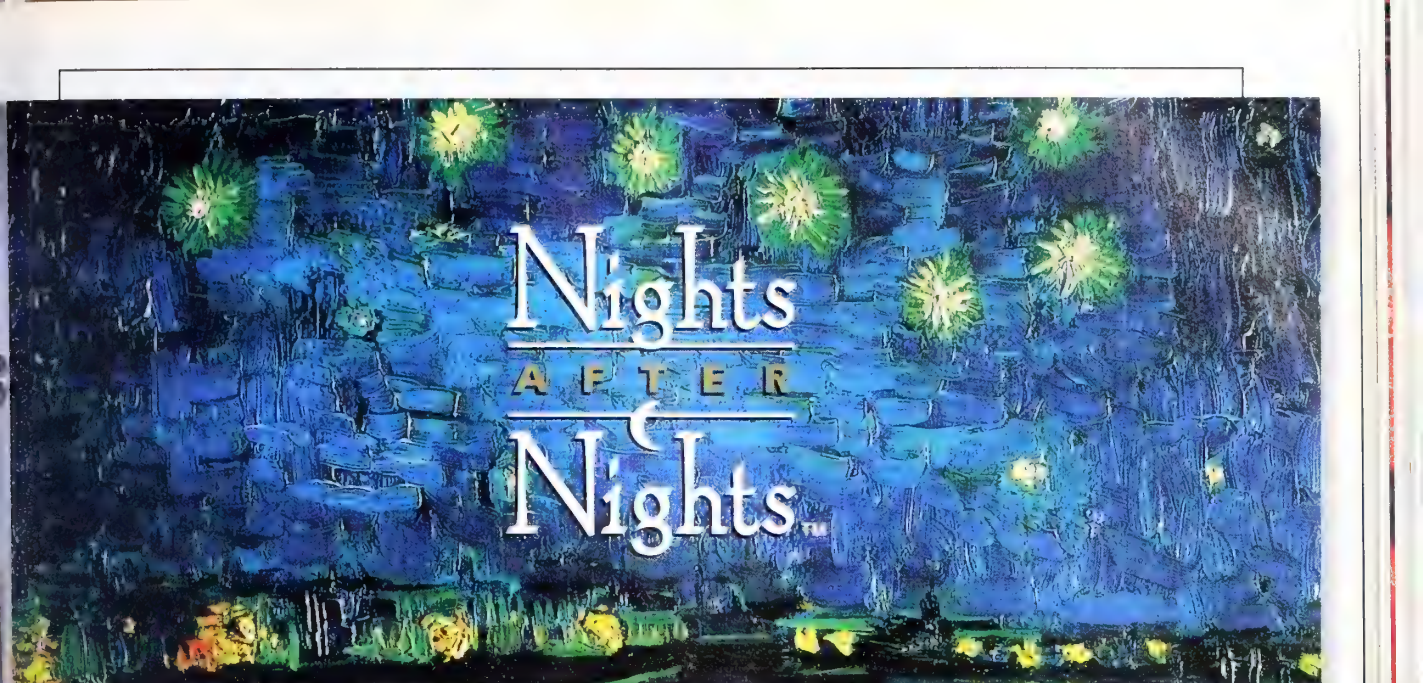
be shown. Meanwhile, the NEC unit will offer 800x600 pixels.

The biggest improvement, however, is in the E-mail program. For the first time, it supports the IMAP protocol that is widely used in corporate mail systems. Unlike the older POP3 protocol used in previous versions of CE, IMAP lets you keep and manage mail on the server, so that the messages you see on your handheld and what you will see when you get back

model, make sure you get a free upgrade to Microsoft new software.

You can also open attachments written in the desktop versions of Word, Excel, and PowerPoint. Of course, this is a highly Microsoft-centric solution. Although the desktop version of Word can open files from Corel's WordPerfect, and Excel can handle Lotus 1-2-3 spreadsheets, the pocket versions are not as versatile. The forthcoming version of IBM Corp.'s QuickView will enable you to at least look at attachments in non-Microsoft formats, but you still won't be able to edit them.

With the size and bulk of these newest "handhelds" approaching such mini-notebooks as the Toshiba Libretto, the choice of which type



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to get is not obvious. As always, it's a matter of trade-offs. The HPCs are significantly cheaper, since mini-notebooks start at around \$1,500. The notebooks use Windows 98 or even NT and can run all standard applications. The HPCs are limited to their built-in applications and a limited selection of add-on programs.

FRUSTRATION. Most users will find Pocket Word and Pocket Excel adequate as long as they're content to limit themselves to the basic functions of a desktop word processor and spreadsheet. Pocket Excel is useful mainly for showing presentations on an external monitor, rather than creating them. Without a disk

drive, HPCs offer limited storage in expensive flash memory, but they're a lot more rugged.

There are three areas where Windows CE is a clear winner. The handhelds turn on the second you hit the power switch, with no boot-up. Their batteries last at least eight hours on a charge, while mini-notebooks rarely get more than two hours. And while Windows CE's synchronization with a desktop is nowhere near as slick as the Palm's, it's a lot better than the mini-notebooks', which have no built-in way to sync.

All of these handheld devices offer one common source of frustration: When

you are away from your desk, getting any handheld to communicate with the rest of the world is harder than it should be. Most of the Windows CE handhelds feature built-in modems. The rest can use PC Card versions, while the Palm uses a special snap-on modem. All require plug-in access to a standard analog phone line, which can be tough to find when you are on the go.

These extremely portable computers really want to communicate through wireless links, but owners are faced with the reality of a wireless infrastructure that isn't quite ready for prime time. Users who live outside of North America and Japan,

especially in Europe, have a lot easier. There, the GSM cellular system provides a standard for wireless communications. The GSM solutions will work in the U.S. on such networks as Omnicom and Sprint Spectrum, but coverage is spotty.

Much easier wireless communications would greatly enhance the utility of a handheld computers. But even with their communications limitations, these lightweight gizmos are useful additions to any mobile executive's arsenal. The trick is sorting through a crowded field to pick the one that most nearly meets your needs.

By Stephen H. Wildstrom

SOFTWARE

The Well-Programmed Portable

Handheld computers come ready to use out of the box, with all the software most customers will want already installed. But that hasn't stopped a small industry from springing up to supply add-on programs. Handhelds have no disk drives, so loading software requires first copying the program to a PC, then transferring it to the handheld over your synchronization setup.

Applications for the popular Palm Pilot are by far the most numerous. If you've added a modem to your Palm, you may want a good mail program to send and receive

messages over the Internet. My favorite is MultiMail PRO from Actual Software Corp. (\$29.95). This program works well with corporate mail systems. Other choices include HandWEB and HandMAIL from Smartcode Software Inc. or, if you just want to access an America Online Inc. mail account, PocketFlash from Power Media (both \$49.95).

The Palm doesn't make for much

of a Web browser, but it can read text pages if you have the HandWEB browser from Smartcode (\$49.95). A better idea is AvantGo Inc., from a company of the same name. AvantGo's free reader allows you to choose

download driving instructions to a Palm, and DeLorme sells a cable that allows you to attach a Global Positioning System receiver, turning your Palm into a navigation aid.

Windows CE starts off with a rich

set of applications built in, but there are still plenty of add-ons available. A popular CE utility for sending faxes is bFAX from BSQUARE Corp. A professional version, which also lets you receive faxes, is \$69.95. The CE Handheld PCs come with touch screens and styluses, but lack handwriting-recognition software. You can remedy this with CalliGrapher from Vadem's Para-

graph Div. (\$49.95) or SMARTwriter Plus from Advanced Recognition Technologies Inc. (\$69.95).

Finally, no computer of any size is complete without games—and there's a vast selection for both the Palm and WinCE. Your handheld computer is probably more versatile than you thought.

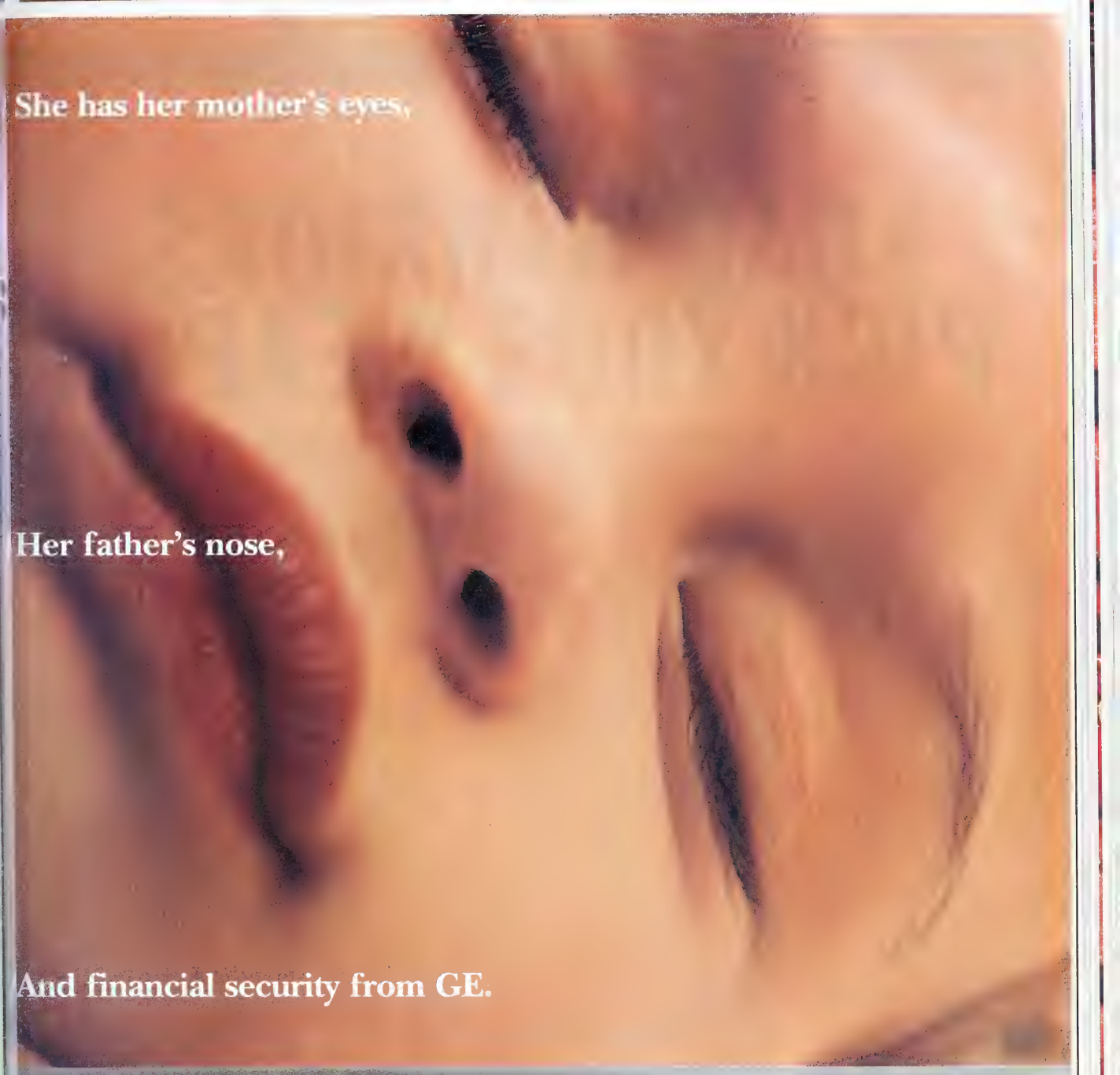
By Stephen H. Wildstrom
in Washington

Handy Software for Your Handheld

PRODUCT	COMPANY	PRICE	THE SKINNY
MULTIMAIL	Actual Software	\$29.95	Versatile E-mail for Palms. Ideal for corporate mail systems.
HANDMAIL	Smartcode	49.95	A good basic mail program for Palm. Easily taps contact information.
AVANTGO	AvantGo	free	Netheads can download Web pages to their Palms (and soon, Win CE device).
BFAF PROFESSIONAL	BSQUARE	69.95	Send and receive faxes on your Win CE handheld.

from free and subscription "channels" and download pages specially formatted for Palms.

Most PC mapping programs now feature links for handhelds, too. Microsoft Corp.'s Expedia Streets can download actual maps to Windows CE handhelds, though using them on the smaller devices can be difficult. Rand McNally & Co. and DeLorme mapping products can



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ROAD WARRIORS, PICK YOUR WEAPON

There's a laptop
for every exec and
to suit every budget

When it comes to laptop computers, there really is no right size. Over the years, some versions have fattened into machines rivaling desktop PCs, while others have slimmed to mere featherweights. For its annual review of on-the-road PCs, BUSINESS WEEK turned to the Jack Kerouacs of the executive set to sort out the sheer variety.

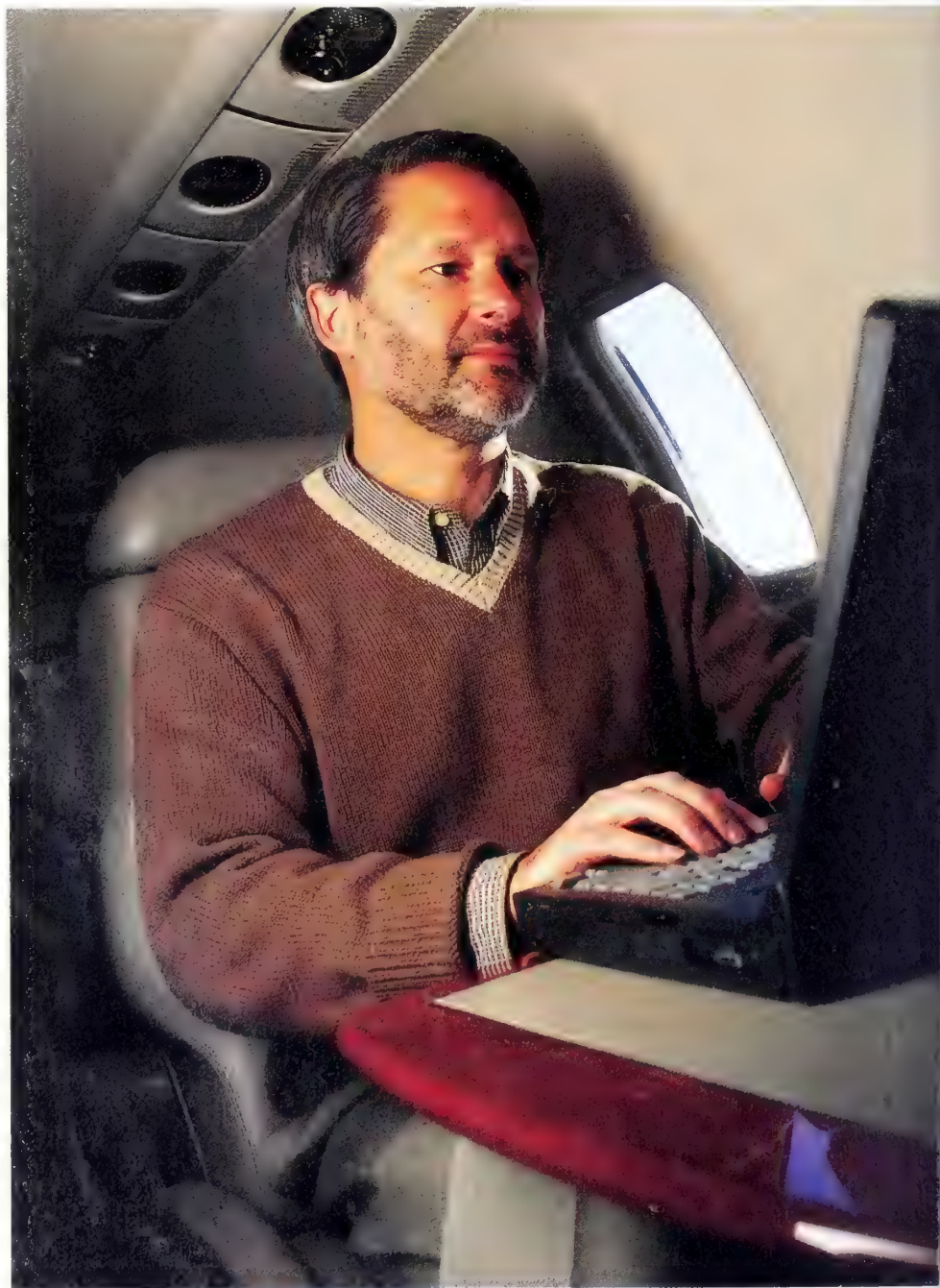
What we discovered is that laptops are a lot like cars: Some execs have a clear preference for the portable equivalent of a Cadillac. Others favor the visual counterpart of a red Ferrari. And then there are the road warriors who won't be happy until portables come in helium cases. (Remember hovercrafts?) While we wait for those wonders, here's how the land lies for everyone from power hogs to the exec who logs a cool 150,000-plus air miles a year.

THE POWER USER. Adrian T. Dillon likes to keep his facts at his fingertips. As chief fi-

Adrian Dillon

EATON CORP.

As CFO of this Cleveland industrial-components maker, Dillon lugs around a Compaq Armada 7800—the electronic equivalent of an office



financial and planning officer at Eaton Corp., a \$7 billion industrial-components maker, Dillon is often on the road visiting company investors and Wall Street analysts or one of Eaton's 150 factories around the globe. To stay on top of things, Dillon lugs the electronic equivalent of an office—a Compaq Armada 7800 that includes detailed financial histories, planning models, and economic models for each of the Cleveland company's three business units. As a senior executive involved with PCs

since 1979, he uses a top-of-the-line machine that delivers performance and convenience above all.

Weighing in excess of eight pounds with a second battery installed, this power-monger really lets you know who's boss. The 7800 comes with a built-in s-video adapter that allows Dillon to plug into large-screen TVs for PowerPoint presentations. It runs on a top-of-the-line Intel Mobile Pentium II micro-processor to slice through financial analyses. It has a hefty 64 megabytes of mem-

ory to store large models and a bay to plug in a second battery for international sojourns. "I really do work and live with this machine," he explains.

For power users such as Dillon, Cadillacs are the only way to travel. Other no-compromise models include the IBM ThinkPad 770, Toshiba Tecra 8000, Hewlett-Packard OmniBook 7100, and the NEC Versa LX. All weigh more than eight pounds, have 13- or 14-inch displays, and a full 6 or 8 gigabytes of disk storage. This class of notebook

usually comes with video-out ports that link directly to big-screen TVs for on-the-road tutorials.

Of course, you had better be in a league to justify this executive luxury. You or your company will lay out \$4,000 to \$6,000 for such a laptop. And like Eaton's Dillon, you had better learn to appreciate weight lifting. "I've been around and using these so long I feel like it's a treat to have something that's only seven or eight pounds," he laughs.

For such executives, pow-

Power Laptops

MODEL	CHIP AND SKINNY	BASE	MEMORY	HARD DISK	WEIGHT	PRICE
IBM	ThinkPad 770X A top-notch Windows NT machine	300 MHz	64 MB	8.1 GB	7.7 lb.	\$5,257
DELL	Latitude CPi Powerful yet light, solid three-hour battery life	300 MHz	64 MB	4.3 GB	7.3 lb.	\$3,199
COMPAQ	Armada 7800 Cornerstone of its class	300 MHz	64 MB	4 GB	7.8 lb.	\$5,250

Multimedia Presentation Machines

NEC	Versa SX A pint-size but powerful presentation machine	300 MHz	64 MB	3.2 GB	4.8 lb.	\$3,799
APPLE	PowerBook G3 Great 14.1 inch screen	233 MHz	32 MB	2 GB	7.8 lb.	\$2,799
HEWLETT-PACKARD	OmniBook 4100 Best value and features	233 MHz	32 MB	4 GB	5.8 lb.	\$3,399

Ultraportables

TOSHIBA	Libretto 110CT About the smallest, lightest Windows 98 computer you can get	233 MHz	32 MB	4.3GB	2.35 lb.	\$1,800
MITSUBISHI	Amity CN2 Slower and bulkier than the Libretto, but a bigger keyboard makes for easier typing	166 MHz	32 MB	2.1 GB	2.6 lb.	\$1,550
SONY	Vaio 505FX 10.4-in. display more like a standard notebook, but super-slim case and stunning design add up to drop-dead cool	266 MHz	64 MB	4.3 GB	2.9 lb.	\$2,100

er portables can never have too many features. Take the Toshiba Tecra 8000, which can be ordered in 5,800 different configurations, including a choice of Windows 95, 98, or NT operating software, digital videodisk (DVD) for watching films on long flights, and a 56k modem. A version with Pentium II 300 MHz processor, 14.1-inch screen, and 8 gigabytes of disk runs about \$4,400.

If you want a laptop that truly replaces a desktop, try the Dell Inspiron 7000. You get a 15-in. screen, a 300

MHz Pentium II processor, 128 megabytes of RAM, and an 8-gigabyte hard drive—at a relatively modest \$3,854. For a further \$149, you can add a port replicator to provide one-touch connection to a printer, mouse, and other accessories. It works out to about 9 lb. and may be the next best thing to an office on the road.

Ken J. Beraduce, chief information officer at consultant Cap Gemini America, also applauds the feature-rich flexibility of the Tecra 8000. Cap Gemini is stocking up on

Tecra 8000s because they offer up to 8 gigabytes of disk storage and the ability to support videoconferencing. "Depending on the job or client, there are some special tasks that only the Tecra [8000] does well," he says.

THE PRESENTATION KING. Jerry A. Moon is the archetype of the traveling show producer—the guy in the airline seat pounding out a presentation to be delivered at his next stop. As director of worldwide marketing communications at Fisher-Rosemount, an Austin (Tex.) unit

of Emerson Electric Co., Moon uses a Dell Latitude XPI to keep track of ad budgets, develop creative content, and log volumes of e-mail.

What matters most to him is the battery life that lets him complete a presentation at 35,000 feet. A devotee of PowerPoint presentation and Lotus Notes E-mail, he praises the Latitude's precision trackball and power management, which lets him quickly reactivate a job that has been suspended, say, for the descent to an airport. With its dual batteries, the Latitude runs for five to six hours without interruption.

Dream machines for marketing gurus such as Moon are just now coming to the forefront. The industry term for these notebooks is "thin and light"—meaning pounds or less and about 1 inches thick. They resemble ultralights but have at least one internal drive bay, so they can do most of the chores of a desktop.

Leading this class is a line up of IBM ThinkPads running 300 MHz Mobile Pentium. The archetype and market leader is the ThinkPad 600. It weighs in at five pounds and rises just 1.4 in. off the airline tray. Toshiba offers the same Intel chip in its Satellite series mainstream portables, as well as in the top-of-the-line Tecra 8000. Several manufacturers, including Dell, Toshiba, and Gateway, sell Mobile Pentium II 300 Mhz notebooks for just \$2,999.

Hewlett-Packard's Compaq OmniBook 4150 is one of the better examples of the pint-size multimedia machines. The 6.6-lb. unit features a fast CD-ROM drive, a large, 14.1-inch screen, and an adapter for television output. For \$4,299, you'll be able to get a top-of-the-line mobile with a 300-MHz Intel processor, desktop-quality accelerated graphics, 6.4 gigabytes of disk storage, in addition

POWER USER

Wired to the World—Without Wires

Finnish architect and industrial designer Jari Salmela does some of his best work sitting in a pine forest about 60 feet from the Baltic Sea. With his Toshiba 300CDD Satellite laptop close at hand, he's free to enjoy nature, reinvigorate himself with a plunge in the sea, and create when the inspiration strikes. "In architecture and design, the work is impulsive," says Salmela, 34.

"You have to be able to switch on the computer when the idea comes to you, and this is where ideas come."

Salmela's two-year-old company, Space Plan, designs everything from furniture to new interiors for 100-year-old buildings. While he still sketches with pen and paper at times, Salmela's passion is virtual 3D modeling, which can be as realistic as a photograph. At Space Plan's headquarters in Helsinki, Salmela has a custom-built desktop with an Intel Corp. Pentium II processor (266 MHz) and 128 megabytes of memory.

TALL ORDER. On the road or at his cottage, Salmela depends on his Toshiba laptop to run all of his powerful software. Although the 3D modeling is a bit slow, the mobility is worth it. Two years ago, he received a wave of remodeling projects for executive office suites in Rus-



SALMELA: "This is where the ideas come"

sia. Working mostly at the cottage, he created dozens of photo-like designs that showed clients what the remodeled offices would look like.

And even though the cottage has no phone line, Salmela can send designs to clients from his hideaway. How? He zaps the information over his wireless phone. With his Nokia 9000 cell phone and a data card in the portable, he can transmit a weekend's worth of designs in seconds to another electronic address or to a printer.

Still, Salmela wants more out of his tech tools. "The ideal computer should learn my handwriting," he says. "And when I draw an arch, it should say, 'Do you really mean that? Or do you think it should be like this?'" That's a tall order. But Salmela's work is sure to keep him testing the creative limits of computers.

By Gail Edmondson in Paris



Who'd of thought that an electronic chip inside your car could help
you avoid curbs, other cars, and best of all, Earl in repair.

 **Digital DNA™**
from Motorola

IT'S HERE.

to 64 megabytes of memory.

Apple Computer Inc.'s new PowerBook laptop is also succeeding in winning fans in many quarters. James Gower, chief executive of biotechnology startup Rigel Inc., uses his new G3 PowerBook as his primary computer and as his chief aide in making presentations. It's so reliable, he reports, that at meetings his financial presentations have gotten themselves moved up the queue as others fiddle

tops: smaller, faster, lighter. As second vice-president for information technology at the Aid Association for Lutherans, he's responsible for maintaining links between the financial-service firm's 1,800 field employees and the head office in Appleton, Wis. A hard sell from IBM recently persuaded him to move his whole sales force onto ThinkPad 600s.

This computer ushers in a new modular design that IBM

plan now is to purchase new portables every two years," down from three-year replacement, Hahn says.

Power management is a big advantage here. IBM's portable runs for six hours with dual batteries installed. Similarly, IBM, HP, Compaq, and Dell have developed ultrafast battery rechargers that can bring a battery back to full life in 45 to 60 minutes, instead of several hours.

Life on the road is full of

for more than 200 MHz on a notebook. "The hunger for the fastest processor has pretty much abated," says A. Hershey, a partner in the firm's architecture-and-standards group. Intel, naturally, is pushing its 300 MHz Mobile Pentium IIs. But there's plenty of life in Intel's older line of Pentium MMX processors, according to Hershey.

Where should you not skimp? Hard drives and main memory. For large applications and files, you need at least 4 gigabytes on the hard drive and 32 megabytes of memory. Dell now offers 64 megabytes as standard. And even that's not enough for users such as Cap Gemini. The company outfits its latest portables with either 96 or 128 megabytes so that staff on the move can quickly access large databases. Another word to the wise: Don't cut corners with video memory. For Web designers—or just avid Internet cruisers—a 4-megabyte complement of video RAM goes a long way toward speeding up screen updating.

If a sharp display is what makes your motor run, consider NEC Computer System's thin-and-light Versa SX. This featherweight—just 5.2 pounds with a built-in CD-ROM—shares a set of common peripherals and accessories with its desktop replacement, the Versa LX. At just 13.3 inches high, it comes with a dazzling 13.3- or 14.1-inch active-matrix display.

Each new generation of notebooks comes with greater capability designed into the box. Even so, the need for accessories isn't going away. For example, if you frequently use a laptop to give presentations to more than three people at a time, you might consider carrying a projector. This will create an image big and bright enough for a fair-size meeting room. A good choice is Infocus Systems Inc.'s new projector, the LP425 (\$4,600).



NEC VERSA SX

with more complex, Windows-based PCs.

Sony Corp., meanwhile, has created a new class of ultraportable, with its introduction this summer of the Vaio 550G, a three-pound, \$2,000 machine with a 200 MHz Pentium and 32 megabytes of memory. Although less than an inch thick, it's bigger than such mini-notebooks as the Toshiba Libretto, featuring a 10.5-in. display and a nearly full-size keyboard. (There's no floppy or CD-ROM drive.) Similar designs are on the market in Japan and should arrive in the U.S. early next year.

THE ROAD WARRIOR. Jeffrey R. Hahn ticks off the three eternal requirements for lap-

'THIN-AND-LIGHT'

At just 5.2 lb., the Versa SX also has a big, dazzling screen—if sharp display is what makes your motor run

promises will be able to support high-performance chips coming from Intel without a major redesign. That means companies buying these machines won't be forced to junk add-in disk drives, batteries, or docking stations as future models appear. For Hahn, the design means he can plan faster replacements without having to ditch the spares and add-ins acquired for the ThinkPad 600. "Our

trade-offs. How much should you pay for extra memory or a larger screen? Do you need a built-in AC adapter, or should you carry around an external device? How important is clock-speed (megahertz) on the microprocessor?

Nobody can answer these questions for you. It's a matter of personal taste and needs. At auditor Ernst & Young, for example, all the executives don't see a need

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weighs 6.8 pounds, compared with 9.9 lb. for the slightly cheaper NEC LT80.

Such fancy accessories won't do you any good if a hard knock cripples your notebook. Manufacturers are trying to spare you that with specially toughened cases. Panasonic's Toughbook 71, for

\$3,499, boasts a "magnesium-cloistered" case, a membrane-protected keyboard, and a shock-absorbing gel-padded disk drive. Gateway, Compaq, Toshiba, and Dell are offering their own versions of magnesium-alloy protection.

A key item on many road warriors' wish lists is a truly

useful wireless modem. For now, slow 9,600 baud speeds and frequent disconnects are keeping most laptop users firmly tethered to wireline phone connections or local area networks. The bottleneck: Wireless networks are still geared to accepting short-duration calls, not big

data files. That situation is going to change overnight. But tethered or not, the latest crop of laptops is giving people their choice of roadsters—be they Cadillacs, Ferraris, or Volkswagen Beetles.

*By Gary McWilliams
Houston, with Steve Wollstrom in Washington*

PERSONAL INFORMATION MANAGERS

Secretaries for the Rest of Us

It is precisely because I don't have a secretary that I have come to rely on a PIM. Short for "personal information manager," these nimble programs, such as the Day-Timer Organizer software that I use, help shepherd me through the day. With a simple mouse click, I can display my daily, weekly, or monthly calendars, and view a prioritized To Do list. I can also access phone numbers and E-mail addresses. When I schedule appointments, the program warns me of conflicts and identifies open time slots. Lest I forget a key birthday or anniversary, my PIM reminds me of both.

Pimming, as I call it, hasn't changed much over the years. But the latest programs promise to take full advantage of the Internet and make it simpler for nomadic executives to swap and synchronize data among their desktop PCs, laptops, and handheld gizmos.

NO ROCKET SCIENCE. Each of the four popular PIMs I tested—Day-Timer Organizer 2000, Lotus Organizer 5.0, Microsoft Outlook 98, and Starfish Software's Sidekick 99—handles rudimentary PIM functions just fine but has shortcomings in other areas.

Nowhere are those shortcomings more obvious than in Starfish's Sidekick 99. With only a few icons, I

found it the simplest PIM to master (though none demand that you be a rocket scientist). Sidekick is a less ambitious PIM than its competitors. The new version eats up just half the hard-disk space of its predecessor, but it has also deep-sixed such features as expense reporting—which I like in Day-Timer—and the ability to create HTML Web pages from its calendar.

While Sidekick has dieted, Microsoft Outlook 98 has bulked up. At heart, it's a muscular E-mail program that lets you easily trash junk mail and preview missives without opening them as a separate

an E-mail into your PIM, you can drag so-called vCard or vCal icons from sites on the Web into the program, and the data will be automatically filled in. It still isn't that easy, however.

FAMILIAR LOOK. As for core PIM functions, both Lotus Organizer and Day-Timer Organizer resemble electronic versions of that old standby, the paper appointment book, and behave in much the same way. The Lotus screen is my favorite. Users can click on tabs (To Do, Anniversary) to bring up pages. Lotus has bolstered the contact-management area, allowing you to store 20 phone numbers and a half-dozen addresses for each contact.

The company says it's also a snap to convert data from other PIMs. Not quite. I never could successfully get Lotus to decipher my Day-Timer databases, even though that was one of the programs it claimed it could mesh with. (It wasn't clear whether the snag lay in my Day-Timer data or

with the Lotus program.)

As for Day-Timer 2000, the program is still versatile and a cinch to use, and none of the other programs provided a compelling reason to switch. Most of Day-Timer's improvements are modest, however. There's a new spell-checker, and you can access phone numbers or your schedule for a given day without fully launching the program. Uh-oh, there goes my PIM alarm—gotta dash.

By Edward C. Baig in New York



PRODUCT	PRICE	THE SKINNY
DAY-TIMER ORGANIZER 2000	\$60	Lets you peek at your schedule and phone numbers without launching the full program.
LOTUS ORGANIZER 5.0	\$79	Best-looking screen and beefed-up contact management.
MICROSOFT OUTLOOK 98	\$109	Solid E-mail capabilities. Leaps beyond its predecessor, but still could be simpler to use.
STARFISH SOFTWARE'S SIDEKICK 99	\$50	Back to basics. Slimmed down, but with fewer features than other PIMs.

window. But I would also give Outlook a passing grade as a PIM—it's just more cumbersome than other programs for adding contacts and appointments.

The new Outlook, along with both Lotus Organizer and Day-Timer Organizer, also promises to exploit emerging Net standards for sharing contact and calendar information via the Web. The idea is that instead of having to retype—or cut and paste—address and scheduling details from

TIP: All of the PIMs tested handle their essential tasks well, so pick the shortcomings you can live with

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WEB

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An IBM Company

DREAM DAYS FOR DESKTOPS

Bargains, bargains everywhere—from starter systems to state of the art

Hear that? It's the sound of personal computer prices crashing through the floor. That's what you heard on Oct. 29 when IBM introduced the new \$599 IBM Aptiva home PC, setting a new threshold in the booming market for inexpensive

machines from top manufacturers. Just a few weeks earlier, Compaq Computer Corp. held the distinction with a \$699 Presario model, after a rebate. And only a few weeks before that the entry-level price for a name-brand PC stood at \$799—that is, without a monitor.

Such is the new pricing order in the hypercompetitive world of PCs. Of course, that's just for the name brands. There already are plenty of upstart companies

breaking the \$599 barrier, including a \$399 model from Emachines, a startup backed by a Korean PC maker, and a \$499 unit from Future Power Technologies, another startup backed by a Taiwanese firm. The bottom line: PC prices this season will likely put a smile on even the most tight-fisted Scrooge.

But low prices don't tell the whole story. For our annual buying guide we have scoured the desktop universe from the sub-\$1,000 crowd

to desktops on steroids—power tools with the latest speedy 450-megahertz Intel chips that are equally comfortable running molecular modeling programs or scanning and debugging millions of lines of code by brute force. The possibilities are limitless, whether you're newbie or an exec with a long list of software skills on your résumé.

Not only do consumers get more for their money these days, they have more choice. Last year, for example, buying the most powerful

Ann Cowperthwaite

SCULPTOR

She uses a 266-MHz IBM Aptiva with a 17-in. monitor for a furniture design business she recently started. Her first piece is an elegant music stand made from maple wood and steel



TIP Treat PC shopping like car shopping—buy last year's model just as the new ones are coming out

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An IBM Company

meant paying over \$3,000. This year, the only machine on our list over that price is the top-of-the line sleek IBM Aptiva—and that's only because it has a flat-panel monitor. And a revitalized Apple Computer has made a comeback with the popular \$1,299 iMac, giving PC buyers a choice other than an IBM-compatible machine (page 154).

DVD, TOO. Ann Cowperthwaite is one of many shoppers in 1998 who is still smiling over the great deal she got. Three months ago, she picked up an IBM Aptiva PC with a 266-MHz chip, 4-gigabyte hard disk, a 17-inch monitor, and a 5-year service

dard 32 Mb of memory and 4-Gb hard disk. What's more, the standard now includes a 17-inch monitor and possibly a Zip drive or DVD drive thrown in as well. It's unlikely that you'll want to watch movies on your PC, but if you use it for training or sales presentations, DVD technology can make those applications much crisper.

That doesn't mean cost-conscious buyers will feel like second-class citizens. Take the popular sub-\$1,000 category. It's the fastest growing segment of the PC market, expected to make up 50% to 60% of PC sales this holiday season. This Christmas the

sive PC? Many smart shoppers who make this choice assume they'll be buying again in two or three years, so why splurge? Others find that sub-\$1,000 machines are great for that second or third machine in the family. Small-business owners, meanwhile, are discovering the joys of computer networks, and need the additional PCs.

Besides, some think it no longer pays to upgrade. James Akstin, a captain in the Haverhill, Mass., fire department, decided his 3-year old IBM-compatible clone was out of gas. So six months ago, he ditched that machine for a Compaq Presario 4540 for un-

Excel programs that come with the machine to do online banking, monitor investment and keep track of the rent he collects on a few condominium properties he owns. He also likes to turn off the monitor and use the machine to play CDs. "The [music] quality is pretty good," he says.

If you're considering a sub-\$1,000 machine, we suggest a basic configuration: 300-MHz chip, 64 Mb memory and a 4 Gb hard drive. You can probably get a decent audio subsystem and speakers as well. With prices starting at \$599 for basic systems—without monitor—from the top PC makers, there

PCs for the Coupon-Clipping Crowd

MODEL AND PRICE	MICROPROCESSOR, MEMORY, DISK DRIVE	SOFTWARE INCLUDED	THE SKINNY
COMPAQ PRESARIO 2266 \$948 (after \$100 mail-in rebate)	Cyrix M2 300 MHz 64 Mb, 4 Gb	Microsoft Internet Explorer, Encarta 98, MotoRacer	One-button access to favorite Web sites, a friendly touch.
HP PAVILION 6330 \$1,098	AMD K6, 300 MHz 48 Mb, 4 Gb	Microsoft Works, Quicken, Microsoft Money 98, Encarta 98.	The price is competitive, but HP skimps a bit on the memory compared with other top PCs.
QUANTEX QP6/333 M-1C \$1,099	Intel Celeron 333 MHz, 64 Mb, 6.4 Gb	Compton's World Atlas, Microsoft Money 97, Dr. Solomon's Virus Detection	Unlike a lot of other low-cost systems, this machine has plenty of room to expand.
COMPUSA C300 \$999	Intel Celeron 300 MHz, 64 Mb, 4.3 Gb	Norton AntiVirus	At this price, a good choice when the kids need their own computer.
APPLE IMAC \$1,299	PowerPC G3, 300 MHz, 32 Mb, 4 Gb	AppleWorks, Quicken, Outlook Express	It's not the cheapest, but it may be the best design and easiest to use.

All models include Windows 98, 15-inch monitor, CD-ROM, and modem

agreement—for \$1,200. A sculptor, Cowperthwaite has two other machines her kids use. But she bought this one for a furniture design business she recently started. Her first piece is an elegant music stand made from maple wood and steel. Cowperthwaite uses her PC in conventional ways—to make up brochures, track her business finances, and do her banking. But she has also taught herself how to write a database program for her business.

Today, you can count on more speed for less money from the top performers, and get double last year's stan-

biggies like IBM, Hewlett-Packard and Compaq are offering a wider array of models in this segment. They're taking their cue from corporate customers, who are now following the lead of consumers and snapping up the same low-priced systems.

So why buy an inexpen-

der \$1,000. "I got a great buy," Akstin says. "Prices have dropped dramatically, and to upgrade my machine wasn't worth the money." Even his son, a computer consultant, thought the price was too good to pass up. Now the 54-year-old Akstin uses the Microsoft Office, Money, and

plenty of room to be flexible and swap better components or larger memory and storage if you like. And don't get hung up on the chip in this price category. There's very little performance difference between Intel, Advanced Micro Devices, Cyrix microprocessors.

But be aware of one problem that has plagued entry-level machines: upgradability. PC makers haven't pushed these prices out of the goodness of their hearts. To cut costs, many manufacturers have sacrificed expandability, which could get you locked into a machine with no room

Why Buy a Cheapie?

Many smart shoppers feel they're going to be buying again in just two or three years, so why splurge?



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	Viewing Angle	Max Res	Weight	Video Inputs	Power Management	Weight w/ Standard Mounting
MultiSync LCD2010™	20.1°	1000x1024	22.4 lbs (10.2 kg) w/ side stand	VHS	YES	YES
MultiSync LCD1810™	18.1°	1280x1024	12 lbs (5.4 kg) w/ side stand	VHS	YES	YES
MultiSync LCD1510™	15°	1024x768	10.5 lbs (4.8 kg) w/ side stand	VHS	YES	YES
MultiSync LCD1510P™	15°	1024x768	10.5 lbs (4.8 kg) w/ side stand	VHS	NO	YES

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for that second disk drive or tape backup unit you want to install. Before you start shopping, take a few moments to think about how you plan to use your computer. If it only needs to last two years, don't worry about expansion. If you'd rather go the upgrade path, we recommend the QP6/333 desktop from up-and-coming mail order house Quantex Microsystems Inc., of Somerset, N.J., which built its machine with expansion in mind.

The other big consideration

The 55-year-old single mom works from her home in Great Falls, Va., transcribing medical reports for a company in New Jersey. She paid \$1,700 for an IBM Aptiva S9C with 34 Mb of memory and a 4-Mb disk drive that she bought last year—but she actually picked it out a year earlier. “I got a good \$1,000 off on it,” she says.

FAST UPGRADES. Mid-range PCs are another hot category this fall, especially with the small-business crowd. Two of our top picks in this category

ing it easy to put the machine on the desktop or floor. That adds up to lower support and maintenance costs because re-jiggering the system requires less time and fewer parts.

Naturally, there is still a good argument for being on the cutting edge. A top HP or IBM machine will remain top for at least a year, whizzing through complex financial databases or the blueprints for a 50-story skyscraper—and they'll still be viable early in the next millennium. Indeed, some people consider

clock speed, expressed megahertz, may be a good place to compromise. Some 333-MHz PCs are faster than higher-MHz models, depending on the disk drive and other parts of the configuration. Dave Wills, a consultant who writes software for medical and telecommunication systems, uses a Dell 333-MHz machine he bought a year ago. He says his machine is faster than some of the 450-MHz PCs his clients use because the disk drive on those systems is much slower, bo-

Power to the People

MODEL AND PRICE	MICROPROCESSOR, MEMORY, DISK DRIVE	SOFTWARE INCLUDED	THE SKINNY
GATEWAY G6-350 \$1,698	350-MHz Pentium II, 64 Mb, 10 Gb	Microsoft Home Essentials, McAfee Anti-Virus	Kudos to Gateway for pricing their machines with monitor. Another nifty touch includes a virus protection program.
MICRON MILLENNIA 400 MICROTOWER \$1,649	400-MHz Pentium II, 64 Mb, 8.4 Gb	Microsoft Home Essentials Power Pak	A top performer for the price of a midrange machine.
NEC DIRECTION SP B450 \$2,200	450-MHz Pentium II, 64 Mb, 6.4 Gb	Microsoft Home Essentials	A good utility infielder with enough power for the home and the home office without putting a big dent in your wallet.
COMPAQ DESKPRO EP \$2,267	450-MHz Pentium II, 128 Mb, 10.1 Gb	Operating system only	Nice design that allows for either vertical or horizontal setup. Loaded with manageability features, including software to warn of impending disk crashes.
GATEWAY G6-450 \$2,499	450-MHz Pentium II 64 Mb, 10 Gb	Microsoft Home Essentials (Office 97 Small Business Edition is optional)	A stunner that is out there on the cutting edge with 19-inch monitor, rewriteable CD-ROM, and DVD. A hot ticket for image or video editors.
IBM APTIVA SE7 \$3,498 (15-inch flat panel monitor)	450-MHz Pentium II 128 Mb, 16.8 Gb	ViaVoice, World Book 98, Norton AntiVirus, Lotus SmartSuite 97	With the flat-panel monitor and high-octane Intel chip, this has one of the best combinations of style and performance.

All models include Windows 98, 17-inch monitor (with the exception of Gateway's G6-450 and IBM's Aptiva SE7), CD ROM, and modem

is the monitor. Most PC makers have cut corners here by throwing in inexpensive 15-inch monitors. But if you're going to be on the computer for more than three hours a day, a 17-inch screen, or a high resolution model may boost your comfort level. For most manufacturers, swapping a 15- for a 17-in. monitor will add about \$200 to the system.

Another trick for folks on a budget: Approach PC shopping as if you were buying a car—and get last year's model just as the new ones are coming out. That's what Mildred Higgins did last year:

are the Gateway G6-350 and Micron Millennia 400 MicroTower, priced at \$1,698 and \$1,649, respectively. This segment is attractive to corporate buyers for several reasons. For one thing, Compaq, HP, Dell, and IBM all bundle in desktop management software, which lets computer managers monitor the machine from afar. Manufacturers also have made it easier and quicker to upgrade and do maintenance on these systems. Compaq's Deskpro EP 6450X is designed so that the CD-ROM and floppy drives can be turned 90 degrees, mak-

ing the high end the only way to avoid obsolescence. “Don't buy anything that isn't cutting edge,” advises Ralph Peterson, a former Microsoft manager who is now a private investor. Peterson bought a Compaq PC with 300-MHz Pentium II and 17-inch monitor last year for about \$2,600. But he found the 48 Mb of memory that came with the machine to be a little skimpy, and crimped some of the investment programs he wanted to run.

If your decision comes down to feature trade-offs—and it almost always does—

ging down the system. Manufacturers list access times on their disk drives, so make sure that when you buy the machine with the fastest clock, you're also getting the fastest disk drive.

If you're willing to pay a dollar, what's the most computer for the money? That may be the Gateway G6-450, a blazingly fast machine that won't peel off your last dollar. For \$2,499 it comes with a 19-inch monitor, rewriteable CD-ROM and DVD. But what's that sound? Could it be more prices falling?

By Ira Sager in New York

TIP Make sure when you're buying a PC with a fast chip that you're also getting the fastest disk drive

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Equity Index 500	*****	*****	*****	—
Growth & Income	****	****	****	***
Growth Stock	****	****	*****	****
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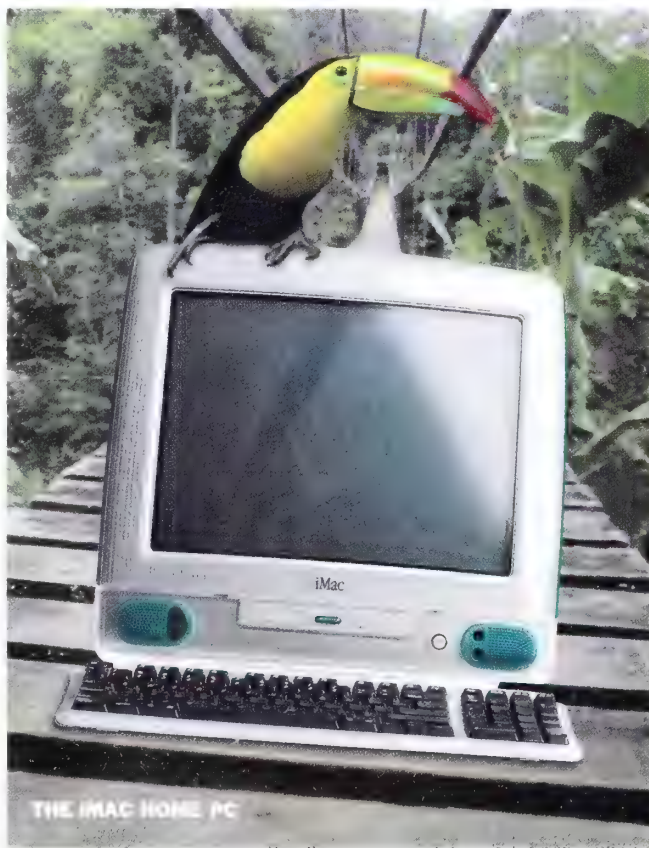
AT LONG LAST, APPLE GETS IT RIGHT

Finally, die-hard Mac users have a reason to feel vindicated

Macintosh loyalists deserve a medal. Since the early 1990s, they have been white-knuckling it through bungled and inferior product launches, diminishing computer software options, and, worst of all, Apple Computer Inc. management's frightful pantomime of rearranging the deck chairs on the Titanic.

These days, though, Mac lovers are sporting that same twitchy, satisfied little smile as Apple überdad Steven P. Jobs. The Mac is back. Apple is churning out innovative speed-demon computers for the home, office, and road. Jobs has reinvigorated the company with a "computers-for-the-rest-of-us" zest, and he's providing not just sizzle, but steak—notably Apple's burly G3 chip, which handily beats out the Pentium II in some applications. "I sit down at any other computer, and it's like, 'Wow, what's wrong with this thing?'" says Kate Dore, a Quincy (Calif.) graphic designer who uses a G3 Power Mac desktop machine. **SLIMMED DOWN.** Persuading graphic designers such as Dore to buy Macs has always been a cinch. It has been harder to get third-party software developers to turn out more Mac titles across-the-board. But that gets easier with Mac sales back onto solid ground. Credit Apple's aggressive design, performance boosts, and pricing moves in laptops, and its spiffy, new iMac home machine.

After I spent a year with a boxy, inflexible 1400-series



THE MUSCLE IN THE MAC

The G3 processors add blistering speed to Apple's iMac, PowerMac, and PowerBooks

Mac laptop computer with a mediocre screen, testing the 266-MHz PowerBook G3 with a 14.1-inch active-matrix screen was like changing out of Dockers and into an Armani tuxedo. The slimmed-down G3 line has won raves everywhere for its exceptionally large screen, its speed, and its standard features across all models—including Ethernet ports, internal modems, and video-

output connectors that enable presentations.

Interestingly, the G3's rounded forms and soft, grippable textures make this not-so-small laptop look and feel smaller than boxier models. Prices for the units with 14-inch active-matrix screens range from \$2,799 to \$4,999. That's not cheap, but it's competitive with Windows laptops.

For the past few months,

the big story is the \$1,299 iMac, Apple's consumer entry, which was designed to snag home Internet surfers with a colorful retro design and Apple's vaunted ease-of-use. I challenged my 9-year-old daughter, Marie—who would take soccer and the Spice Girls over computer any day—to take an iMac from box to book report. In 21 minutes, she had conquered cords and the registration process, found a word-processing program, launched a new document, and typed "The Hidden Starecase." Tack on 10 more seconds to find the spell checker and fix the title.

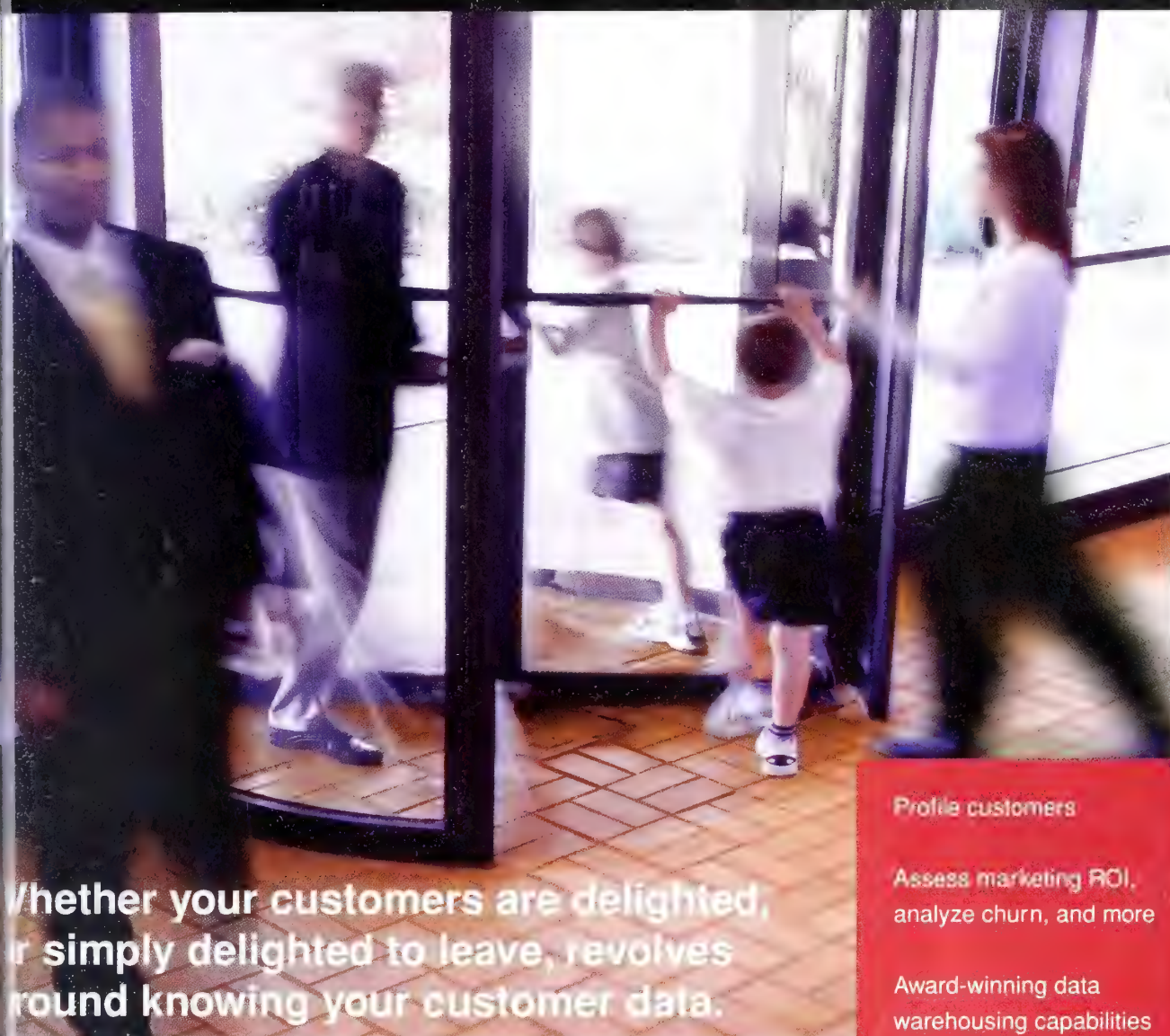
Marie never opened a manual or even read the simple instruction card. Just a few minutes more, and we found a Nancy Drew mystery page on the Internet and purloined a graphic to use on her report cover. Apple's new software upgrade, Mac OS 8.5, has a nifty "Shellock" program that scopes out the machine you load on, finds stuff you are looking for, and fetches material you request from the Net without firing up a browser.

A few drawbacks: iMac keyboard feels a bit cramped. And while kids seem to like its round mouse, I found it awkward. Also, before buying any Mac computer, do a critical and unemotional assessment of your software and system needs. There's plenty of good software for personal and family use. But offices are a different story. Many systems managers don't like supporting both Windows and Mac computers, and third-party software makers can be slow with upgrades on existing programs.

Apple, to its credit, makes it easy to research the availability of software through a dedicated Web page: www.macsoftware.apple.com. The good news is, buying a Mac actually makes you feel hopeful again.

By Joan O'C. Hamilton
Menlo Park, Calif.

Customer Relationship Management



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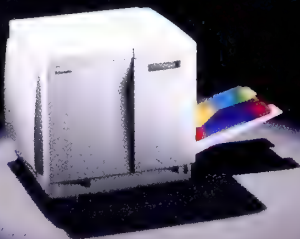
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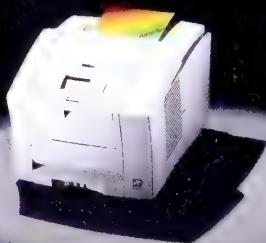
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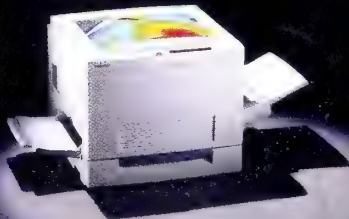
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FLAT PANELS THAT WON'T FLATTEN YOUR BUDGET

ne skinny monitors
e looking better
and costing less

What a difference a year makes. In 1997, those oh-so-sleek flat-panel monitors were oh-so-expensive. At \$700 a pop, nobody but a die-hard enthusiast or the beneficiary of the latest Silicon Valley initial public offering would spring for one. This year, monitor manufacturers have pushed prices down, while maintaining—then improving—performance. Although high-end flat panels can still cost upwards of \$3,000 each, a slew of skinny displays are selling for as little as \$600. For the space- and style-conscious, it could be money well spent. “I’m not screaming about the price,” says Kevin M. Clark, an independent photography director who spent \$1,000 on a 14-inch liquid-crystal monitor.

Sold by ViewSonic Corp. in Walnut, Calif. “The payoff is worth it,” he says. Flat-panel displays—image your current monitor without the big butt—will account for less than 1% of all computer monitors purchased in the U.S. this year. It checks out the product’s growth. That translates to 8,000 screens in 1998, or nearly five times the number sold last year, says Stanford Resources Inc., a research firm in San Jose, Calif.

To get a better view of these displays, I happily cleared the clutter from my desk and plugged in a few of



the latest svelte screens. Immediately, an extra 8 inches of space opened up before me. (It was just enough room to spread out my notepads and declutter my desk.)

In the TV universe, several different flat technologies are competing with each other.

MONITORS

These include an expensive approach called plasma that is well-suited to very large screens. When it comes to monitor replacements, though, choices are more limited. All the popular models

are liquid-crystal displays. They don’t get much bigger than 15 inches. But at that size, an LCD will weigh just half as much as a comparable cathode-ray tube (CRT) monitor. And it’s typically about 20% as deep.

BREATHING ROOM. Power users can relate to that. After buying 600 IBM flat-panel displays last year, CIBC Oppenheimer Corp. in New York was able to squeeze 53 traders in a room that previously housed just 12 executives. “And we didn’t pack

them in like sardines,” says Managing Director Kosmas T. Spiridellis.

Viewing area is another flat-panel selling point. When you’re talking about CRTs, the typical “17 inches” you see advertised is a diagonal measurement that includes portions of the screen you can’t actually see. Precious inches are hidden behind the plastic casing. LCDs, by contrast, come exactly as advertised. You see the whole screen, so a 15-inch flat-panel gives you the equivalent of a 17-inch CRT.

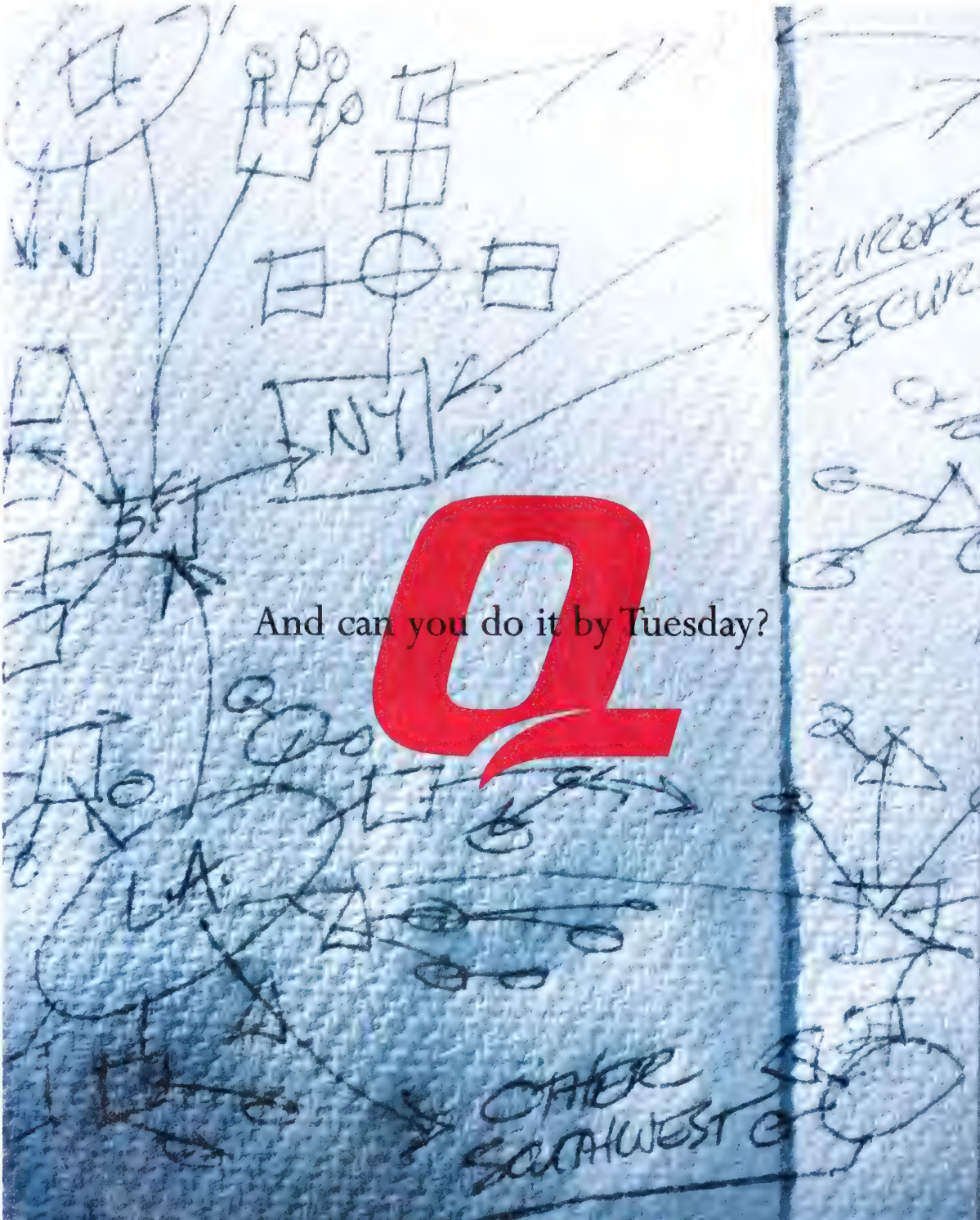
Of the screens I personally tested, the ViewSonic VPD150 came out on top. Its 15-inch panel can be twisted from a horizontal to a vertical angle for better viewing of oblong images. The image also seemed sharper—and others have had the same reaction. “When I fired it up, I said, ‘Boy, this is the future of monitors,’” recalls Clark. He also says his ViewSonic is brighter than his old 17-inch CRT monitor.

Naturally, there’s a dark side to flat-panel monitors. Straight out of the box, they’re harder than CRTs to hook up. When I first plugged in a NEC MultiSync 1500M, the letters and icons on the screen looked out of focus. I called for help and was informed by a technician that “you can’t just plug

Monitoring Your PC with Style

BRAND/MODEL	PRICE	VIEWABLE AREA	RESOLUTION	SKINNY
VIEWSONIC/VPD150	\$995	15 in.	1024x768	Our best buy
SILICON GRAPHICS/1600SW	\$2,595	17 in.	1600x1024	Primo—if you can afford it
IBM T55A	\$999	15 in.	1024x768	Slickest design of the bunch
NEC/MULTISYNC 1500M	\$999	15 in.	1024x768	Good, but lots of adjustments

TIP: The “jaggies,” or jagged edges, appearing in text don’t appear in more expensive models



And can you do it by Tuesday?

COMPAQ

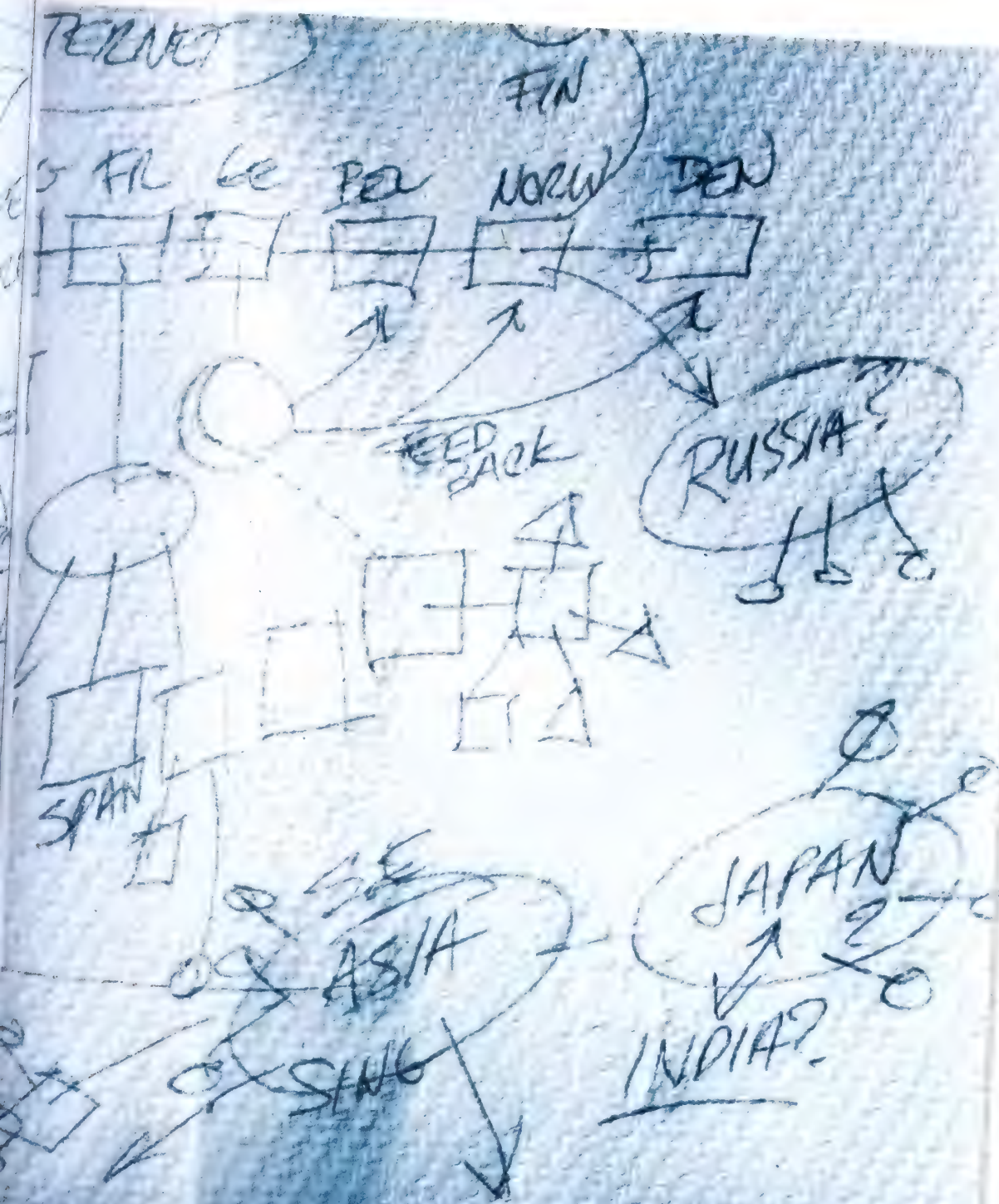
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them in and go." Why? Flat panels and CRTs manage picture elements, or "pixels," in different ways. Images on the flat panels can be brighter and sharper. But it takes some adjusting of the computer's settings to get there. Despite adjustments, I never got the NEC's settings straight, so the screen had an odd, punched-in look.

JAGGED EDGES. I was also annoyed by jagged edges in the text. Monitor makers say that the "jaggies" disappear as you step up from an XGA to a superXGA monitor. To experience that firsthand, I sampled Silicon Graphics Inc.'s much-praised digital 1600SW model—the same 17-inch that Microsoft Chairman William H. Gates III ordered for his desktop. The picture quality made me want to jump into the screen. (But the \$2,500 price tag made me want to jump out of the window.)

Compared with CRTs, flat panels also require more nerving around at the back of your PC. The Silicon Graphics and ViewSonic models I tested all forced me to install graphics cards in my PC. A real techie can probably do that in a couple of minutes. For others, it could take most of the afternoon.

There's another drawback with flat-panel monitors. Just like laptop LCDs, the new flat panels don't look good from any angle but straight on. Or rephrasing that slightly: The picture becomes a big, ugly smear. Forget about playing PC games with a buddy at your side.

All in all, these monitors are pretty nifty. For most of my trials, I had colleagues ogling over my shoulder. O.K., so they're at least three times more expensive than a top-notch 17-inch CRT. And prices won't drop significantly for several months. But if you want to see the future, this is the only way to view it.

*By Roger O. Crockett
in Chicago*



THE CANON BJC-50

A RAINBOW OF CHOICES

The boundaries are blurring between inkjets and lasers

For years, the world of color printers was divided into two poles. To the south were low-end inkjets, which cost as little as \$90 and appealed to home users. To the north were color lasers, priced at thousands of bucks each and embraced by the power-graphics crowd. Now, the boundaries are blurring. Such features as color invoices and splashy letterheads will soon be within everyone's reach.

Leading the way in value is Hewlett-Packard Co., whose HP 2000C series of color inkjets rivals the lasers in quality and operating cost—and at a fraction of the price. This network-ready printer

is the first from HP to use separate printheads and ink tanks—which means that the four ink cartridges (magenta, cyan, yellow, and black) may be replaced without discarding \$30 printheads that last four to five years. The result: printing costs of 5¢ per color page and 2¢ for

black-and-white—about half what you'd pay using other inkjets.

If you want the finer resolution and higher capacity of a laser printer, check out Tektronix Inc.'s Phaser color printer. At \$1,995, it costs about \$500 less than comparable models—and the 740L monochrome version can be converted to color for \$500 in service fees and extra cartridges.

INFRARED SIGNALS. For speed at low operating cost, Xerox Corp.'s monochrome DocuPrint N40 is a sound buy. It can churn out 40 pages per minute at a penny each. And the machine sells for just \$3,000—about one-fifth the price of high-volume printers a year ago.

And for those executives who want to print on the run or late at night in their homes, Canon's new BJC-50 portable is the best buy. The \$349 color inkjet, powered by a lithium-ion battery, is the size of a cigarette carton, weighs just 2.1 pounds, and can print out 100 pages without recharging. Its infrared data port can receive signals from infrared-equipped laptops and organizers, and makes printer cables unnecessary. Best of all, you can replace the printhead and ink cartridge with an optional scanner. That will help you create a more docu-

ments—and let you print them out, in color, at the office, too.

*By Steven V. Br
in Los Angeles*

PRINTERS

Printers Anyone Could Love

PRODUCT/PRICE	THE SKINNY
HEWLETT-PACKARD HP 2000C \$799	Network-ready ink jet that rivals lasers in quality, speed, and operating cost
TEKTRONICS 740 \$1,995	First color laser to fall beneath the \$2,000 price barrier
XEROX DOCUPRINT N40 \$3,000	Monochrome, but unbeatable price for 40 pages per minute
CANON BJC-50 \$349	Nifty cigarette-carton-size portable with infrared data port

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fig. 1

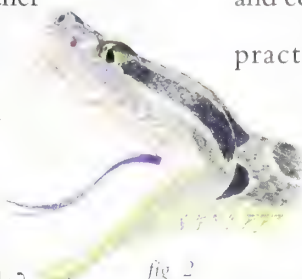


fig. 2

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WIRELESS WITH ALL THE TRIMMINGS

Phone outfits race to outdo each other in offering users distinctive services

‘Who would you like to call?” asks a woman’s too-chipper voice. “Home,” I say. The cab driver glances back at me in his rearview mirror. I’m sure he’s wondering whether he has picked up one of New York’s mentally unstable. I’m sitting alone in the back of the taxi, but I’m not talking to myself. Honest. I’m checking out a new voice-dial phone—made by Samsung Group and marketed by Sprint Corp.—by trying to pick up messages from my home voice mail.

But the wireless phone doesn’t understand what I’m saying. “Home,” I repeat. As luck would have it, a cacophony of car horns erupts just as I speak. Nevertheless, the phone starts to dial. “Hello?” says a sleepy voice at the other end of the line. I mumble something incomprehensible and hang up immediately, since there could not possibly be anyone at my apartment. Then, I remember that the phone is able to tell me what number I just dialed. That information is not comforting: The phone has somehow mixed up “Home” and “Mom.” I’ve just prank-called my mother.

Sorry, Mom. But this is what comes with the new



age of wireless technology. What matters these days more than the telephone you get are the services that come with it—even if they don’t always operate perfectly. Wireless services now go well beyond the traditional features of Caller I.D. and voice mail. You can get everything from voice-activated dialing and free long distance to morning news briefs and E-mail. As the competition among wireless

carriers gets more intense, the ability to provide a distinctive service is becoming critical in separating the winners from the losers.

GO DIGITAL. A word of caution, though: To benefit from the newfangled services, you need to get a digital phone. Analog phones work well enough if you just want to chat away—and they’re often the cheapest option for those who just want a phone for emergencies.

George Fraser

MOTIVATIONAL SPEAKER

The boom in flat-rate calling is a boon for travelers. Fraser, an author and lecturer, says his wireless phone bill has been cut in half by AT&T’s Digital One Rate plan, which he calls “the greatest thing since sliced bread.”

but none of this really matters for customers. All they offer good voice quality, which technology you choose isn’t critical—as long as you go digital.

Here’s a suggestion to help deal with the flood of new services: Pay a little more—it’s worth it. The wireless industry will swell to an estimated 66.5 million subscribers in the U.S. by the end of this year, up from 53.5 million in 1997, according to



1. Ein Anlagekapital von 1000 € wird zu einem Zinssatz von 5% p.a. für 10 Jahre angelegt. Wie hoch ist der Zinseszins nach 10 Jahren?
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Connected Organizer



ing to market researcher Dataquest Inc. But stiff competition means that the average revenue per customer is sliding by about 8% per year. This development has made carriers rabid to attract heavy-spending customers. Omnipoint, for example, charges 67¢ a minute if you choose a \$20-a-month

plan, but the rate drops to 17¢ a minute if you pay \$50 a month. But no matter which plan you choose, Omnipoint throws in additional goodies, such as *The New York Times* headlines and horoscopes.

Omnipoint is one of several smaller carriers that is worth checking out if you

want to get enhanced services such as news or other information on your telephone. Omnipoint, Western Wireless, Aerial Communications, and several others use GSM technology, which is the most sophisticated of the three digital standards: It has been in use in Europe for years. That permits Omni-

point to give on-demand services that competitors have a hard time managing to plicate. With the company service, for example, you request a stock quote what the weather is in Chicago—and have an answer moments.

Nextel Communications Inc. is one of the most in-

POWER USER

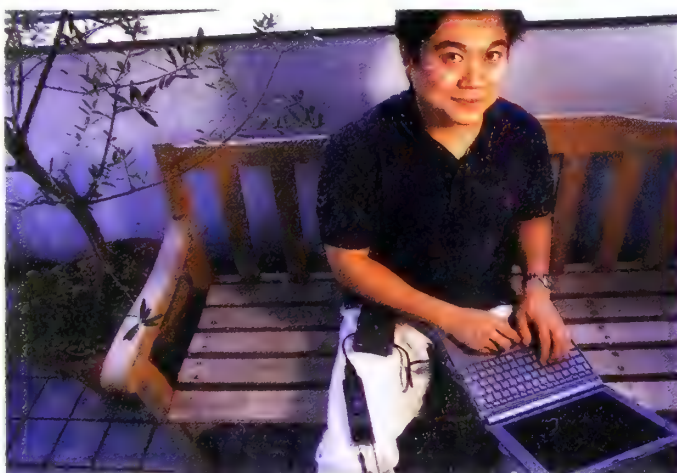
Japan: Where Less Is Really More

With four mobile phones, Joichi Ito is a living, breathing market test of wireless technology. As he raced to catch an international flight in late October, the 32-year-old Internet pioneer spent most of the 90-minute drive to Tokyo's Narita airport on his Japanese digital cellular phone—checking voice mail and downloading E-mail messages to his notebook PC. He also carried a personal handyphone system (PHS) handset in the event he needed high-speed data-transmission capability. After landing in Los Angeles, he pulled out a U.S. digital phone to check E-mail again. He also has a European phone, though he didn't bring it on this trip.

Which country does he think has the best phones? No question: Japan. "I care about size and function," says Ito, who founded Digital Garage, a company that represents the U.S. search engine Infoseek in Japan. "And [Japanese] phones come in the smallest formats with the most functions."

That's not just national pride. As wireless use has boomed around the globe in recent years, Japan is the country that's pushing the envelope in wireless phone design, making devices ever smaller and lighter. Consider Ito's phone of choice: a sleek, 2.8-ounce wonder from Matsushita Electric Industrial Co.'s Panasonic division that fits in the palm of his hand. In contrast, Nokia Corp.'s 6160 phone—all the rage in the U.S.—is 70% heavier, at 4.8 ounces.

That doesn't mean the Japanese are skimping on features. Ito's phone comes with all the typical bells and whistles digital phones offer elsewhere—Caller I.D., voice mail, and a variety of ring modes, such as a vibrator function. And for a reasonable \$225, the Panasonic 206 goes well beyond the norm. It can store up to 500 names and phone numbers, using the Roman alphabet or Japanese characters. It boasts an answering service provided by



ITO: Looking for the smallest phone with the most features

the carrier as an alternative voice mail. And if Ito receives a call from someone listed in his VIP group, such as key business associates or his girlfriend, the LCD screen on his phone lights up orange instead of the regular green. Like many of his generation in Japan, Ito's wireless handset is his primary phone. "I don't even know my home number," he says.

What's driving the technological innovation? It helps that the Japanese cellular market has exploded over the

past five years from almost nothing to 36.5 million subscribers—a 29% penetration rate that puts it behind only a handful of countries, including Finland and Israel. More than that, Japanese consumers have shown an insatiable appetite for ever-smaller phones that has been fed by fierce competition among consumer electronics giants such as Sony Corp. and Matsushita. Ito, for example, has gone through 30 mobile phones in nine years.

Still, Japan's design wizardry hasn't spread to the rest of the world yet. Forays outside the country by Sony, Matsushita, and Nokia have met with only moderate success. "Japan makes the smallest, most advanced handsets in the world," says analyst Makio Inui of Salomon Brothers in Tokyo, "though it's still not clear whether consumers in other countries want such tiny phones."

Ito, who has been sought out by Japanese government officials for his knowledge of the Internet, has some ideas on how to make the ideal phone. He believes that the winning combination is a tiny device with dozens of functions and one common global standard. Of course, that's only a dream these days. For now, he is eyeing a \$7,000 Iridium satellite phone developed by Motorola—it weighs about 2 pounds but it works around the world. "I just might buy myself one for Christmas," he muses. At least then he'll have only one phone to lug around when he travels.

By Irene M. Kunii in Tokyo

TIP: Pay that little bit more when choosing among the flood of new gimmicks. It's worth it in the long run.

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vative wireless providers, especially when it comes to services for businesses and executives on the go. It has a service called E-mail forwarding that lets you take E-mail sent to your work or home PC and forward it to your Nextel phone—at no additional charge. You get only the first 25 words or so of the message, and you have

erates on the Nextel network, has a built-in speakerphone. That way, a team of people roaming the testing grounds can all talk together to someone off-site. “To be able to throw that phone on the table in a conference room with 30 people is pretty impressive,” says Turner.

Nextel does have its drawbacks. The service isn’t

flat-rate calling. With such plans, customers pay just one price per minute—no matter where they’re calling from or to. This means they don’t have to worry about long-distance charges or exorbitant “roaming” fees when they’re calling from outside their home territory. George C. Fraser, an author and motivational speak-

for 500 minutes, but if you roam beyond the company network, you pay a price of 69¢ a minute. So far, Sprint’s network covers 46% of the U.S. population.

CROSSING BORDERS. Even so, flat-rate plans can mean big savings. Steven Harter, a communications manager at San Antonio AirLife, which transports patients by helicopter

Roam Free with Wireless

COMPANY	MONTHLY COST OF NATL. PLAN	THE SKINNY
AT&T	\$90 for 600 minutes	This innovative plan boasts free long distance and lets you roam throughout the country, making it a hit with customers and a threat to competitors, who are scrambling to keep up. At a minimum of \$90 a month or 15¢ a minute, the service is pricey.
SPRINT	\$50 for 500 minutes	Sprint’s package includes free long distance and has a lower price tag than AT&T’s plan. But customers have to pay 69¢ a minute when they roam off of Sprint’s network—a likely occurrence for heavy business travelers.
BELL ATLANTIC	\$160 for 1,600 minutes	For most customers, the Baby Bell is not the best place to go for nationwide service, since its lowest-cost package is so expensive. Still, customers who stick to the East Coast may find Bell Atlantic attractive because of its reasonable regional rates.
NEXTEL COMMUNICATIONS	\$90 for 650 minutes	Nextel, which primarily targets businesses, offers free roaming and a host of whizzy services, such as conference calls and the ability to push one button to talk instantly with up to 100 people. And recent price cuts make it affordable even if the company isn’t picking up the tab.

to read them on a screen only slightly larger than a matchbook. But at least you’ll know if you get any urgent messages while you’re out of the office.

ON THE GO. Nextel also offers a special feature that’s a cross between a conference call and a walkie-talkie: You push one button after selecting a particular work group and can immediately speak to as many as 100 people. This has greatly improved the ability of employees at General Motors Corp.’s testing grounds to get in touch with each other. The 900 workers are constantly out testing cars, so it’s nearly impossible to catch them in their offices. But now that they carry Nextel phones, they have a better chance of reaching one another. “We’re confident this is going to cut the time it takes to get jobs done,” says Jack Turner, director of vehicle development tests.

What’s more, the Motorola Inc. i1000 phone, which op-

erates on the Nextel network, has a built-in speakerphone. That way, a team of people roaming the testing grounds can all talk together to someone off-site. “To be able to throw that phone on the table in a conference room with 30 people is pretty impressive,” says Turner.

Nextel does have its drawbacks. The service isn’t

cheap, even though new, lower rates will be introduced on Nov. 9. It costs about 14¢ a minute under the new plan compared with the 10¢ a minute offered by many rivals. Nextel’s phone is too technical for most general users: For example, you need to punch in *#2-6 to program a name into speed-dial. And Nextel has many regions where you can’t get service, since it doesn’t use cellular carriers as a backup to its own network. In my experience, coverage in the New York-to-Boston corridor is spotty, and parts of Georgia are not covered at all.

The biggest change during the past year has been the booming popularity of

er who travels an average of 25 days a month, says AT&T’s Digital One Rate plan has cut his wireless phone bill in half, to about \$90 a month. “I just think this is the greatest thing since sliced bread,” he says.

While simplicity is flat-rate calling’s biggest appeal, there is fine print you need to consider. AT&T offers the most straightforward plan: For as little as 11¢ a minute, you get free long distance and roaming any place in the country. The only catch is that the cheapest plan you can get is a steep \$90 per month—so you have to be a heavy user to make it pay. Sprint offers a similar plan that starts at \$50 a month

copter for two Texas hospitals, estimates that Sprint service has cut the bill on his work phone in half. Alysse Resh, an account representative for 3M who works in the District of Columbia, Maryland, and Virginia, used to spend \$350 a month on wireless services. Now, with Bell Atlantic Corp.’s flat-rate plan, her bill is \$90. “My boss is thrilled,” she says.

And there’s more to come as wireless carriers rush to develop enhanced new services. Omnipoint started marketing a wireless service in July that lets you use the same phone in the U.S. and 37 other countries. AT&T and others are trying to make it easier to access Web sites from wireless phones. And one more future improvement: Samsung and Sprint insist that voice dialing will become more accurate in the future. I’m sure Mom and Dad will appreciate that.

By Peter Elst
in New York

A MOBILE SPEAKERPHONE

Motorola’s new i1000 lets a whole group of people testing cars at a GM track confer with someone off-site



The sky keeps its true color

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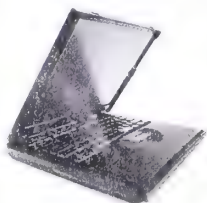
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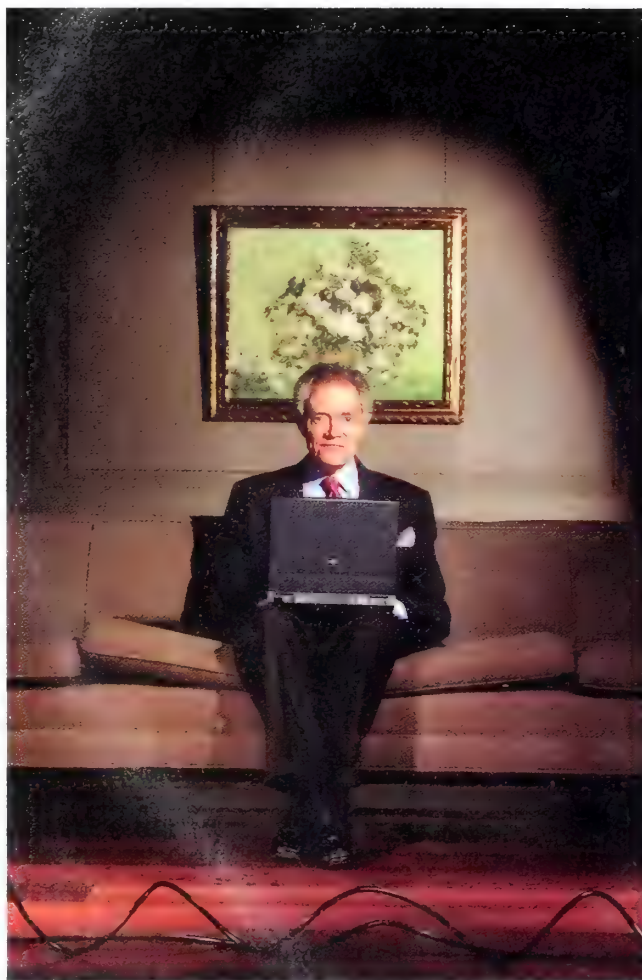
A VIRTUAL CONCIERGE AT YOUR SERVICE

Stuck in a strange city? The Net can get you up to speed fast

This is one busy guy. J. Carter Brown is the director emeritus of the National Gallery of Art in Washington. He's also chairman of Ovation, a cable-TV channel devoted entirely to the arts. And then there are the 20-odd art-foundation, university, and prize boards that he sits on as a trustee or member. So Brown does tend to be on the move. During a typical week in October he zipped around the Northeast, going from Washington to New York to Pittsburgh and back to Washington.

Thank heavens, then, for the World Wide Web. For busy executives such as Brown, the Internet offers valuable resources that can smooth the path. And they are always just a click away. When Brown is on the road to New York, for example, he uses local guide Web sites from *The New York Times* and Microsoft Corp.'s Sidewalk to look up restaurants and museum events. For a trip farther afield to Kansas City, Mo., he browsed the CultureFinder site to get the scoop on local shows. And he's tapping into Operabase.com for a trip at the end of November to Paris. Using the Web to keep up on the arts is all in a day's work for Brown. "I use these sites all the time," he says. "There's nothing static about the arts world."

Brown's work may seem like play to some, but his words ring true for executives in just about any field:



There's no standing still in the Internet Age. Last-minute flights, reservation changes, and keeping up with a deluge of E-mail, faxes, and voice mail are facts of life for the exec on the go. But a whole set of online services dedicated to easing travel is out there for those who know where to look. And these sites can quickly transform a Web browser into a digital concierge.

Traveling typically starts with reservation services. Travel sites were one of the

first to catch fire online, and a number of them cater specifically to frequent business travelers. Among the top are TheTrip.com Inc. and Biztravel.com Inc. Biztravel (www.biztravel.com) was rated the No.1 travel service for business travelers out of 19 sites surveyed by researcher Gomez Advisors, while TheTrip.com, which also caters to consumers, was rated No.2 for business users.

What's compelling about Biztravel.com is how it comes

up with its recommendations. Flight, hotel, and car-rental itineraries are created based on members' tastes, such as aisle vs. window seats, as well as membership in frequent-travel programs. Because it tracks more than 100 frequent-travel programs, Biztravel.com can pick out the best combination of car rental, flight, and hotel arrangements to maximize the number of points for a trip. In TheTrip.com's favor is its ease of use and tons of information, such as city maps and guides, though the site provides about 100 destinations.

LOOKING LIVELY. Guides are exactly the sort of thing someone unfamiliar with a city needs. The problem is finding one you can trust of a site with attitude. Since Microsoft recently revamped its Sidewalk service to concentrate more on electronic commerce than entertainment, CitySearch is standing as one of the best.

J. Carter Brown

OVATION

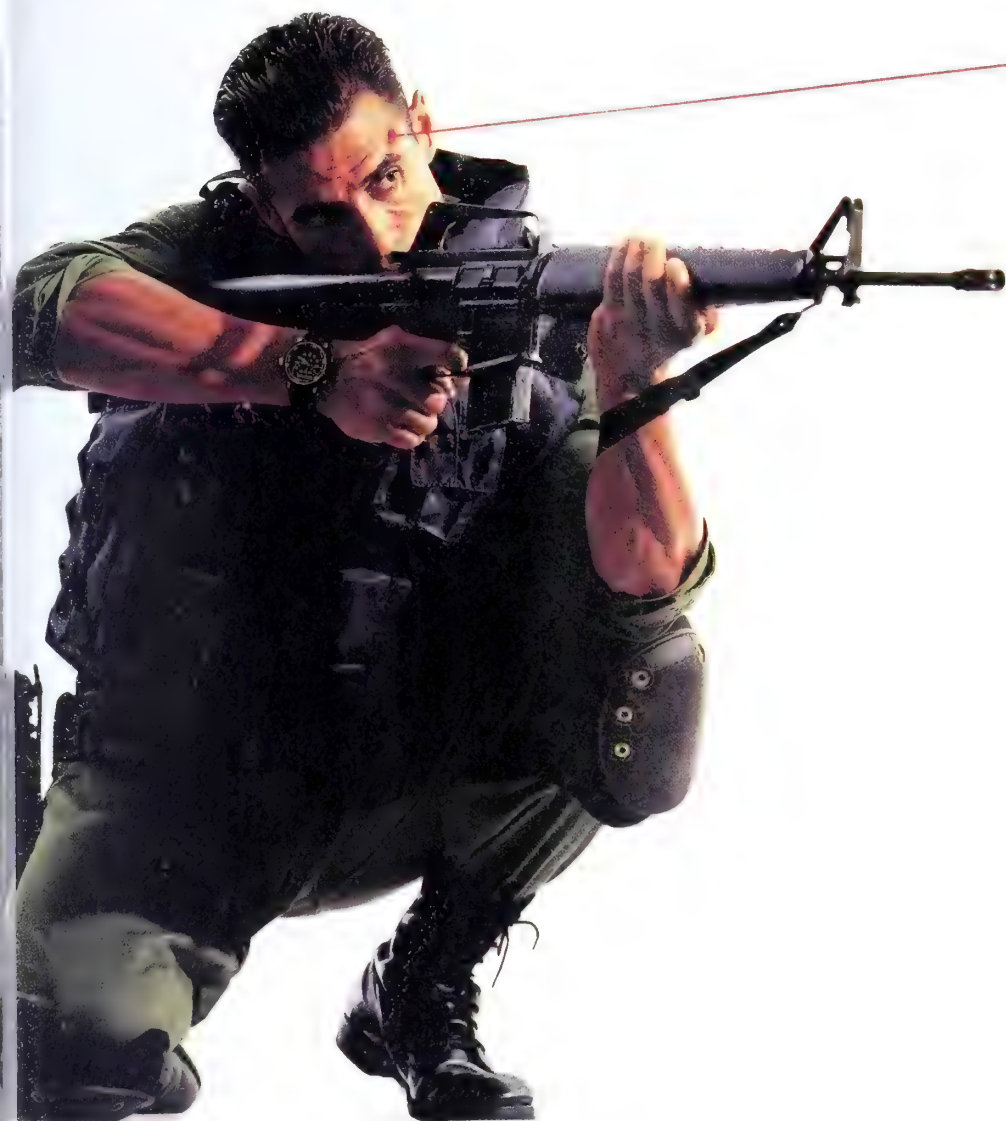
Brown, chairman of the Ovation cable-TV network and a trustee or board member of a score of art organizations, depends on a host of Web sites to track down exhibitions, opera performances, and restaurants on the road.

bets for wide-ranging information on entertainment, restaurants in 15 metropolitan areas. And of course general-interest portals such as Yahoo! Inc. and Excite Inc. also serve up local listings such as movies and weather.

The downside to the kinds of services is the plain-vanilla look and feel. But there are some lively alternatives, especially on Web sites of local newspapers. This summer, the *New York Times* launched

TIP: Register at local guides to receive E-mail alerts about events in cities you frequently visit

Most firewalls are like bullet-proof vests. That's the problem.



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network
ASSOCIATES

Who's watching your network

NewYorkToday, a stellar site that can be personalized and uses the paper's treasure trove of entertainment and restaurant reviews (www.newyorktoday.com). *The Washington Post* has a nice layout under its Style section online that's full of reviews, addresses, and maps. There's a visitor's guide, too.

Or try a quirky site such as CultureFinder, which offers the inside scoop on entertainment happenings. The service is a hub of listings from 1,500 arts organizations in more than 550 cities for a

tel room or don't want to watch TV and wait through listings for Florida weather when all one cares about are the skies in Texas.

Online maps can also be critical in strange cities. The best services, such as MapQuest at www.mapquest.com and MapBlast! at www.mapblast.com, are licensed to sites at different companies, such as CNN and Infoseek Corp., but it's just as easy to bookmark the map sites themselves. A really impressive map is Microsoft's Terraserver, which has the

French language Voila.fr from telecommunications giant France Telecom or Germany's Fireball.de. Other easy-to-use services from Instant Passport and the U.S. State Dept. (travel.state.gov/passport_services.html) make getting the right travel documents much simpler and faster.

Once on the ground in foreign cities, executives can turn to ATM locators on sites from Visa International and MasterCard International Inc. (www.mastercard.com/atm/ and [appointments, and the r business documents while the road. The solution n executives use is dialing a corporate network from laptop. But that can be complicated, and it doesn't necessarily give you access all the information you r on your desktop back at office.](http://www.visa.com/cgi-bin/</p>
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TIME-SAVERS? New serv such as Visto Corp. are ing to do away with t bother by offering tual Web address bod Launched 11 months Visto (www.visto.com) y copy address and ca dar information, E-mails,

Surf and Ye Shall Find

BIZTRAVEL Rated the No. 1 travel service for business travelers by researcher Gomez Advisors, Biztravel recommends itineraries based on members' tastes and their frequent-travel programs. Other perks include pager alerts when flights change and the ability to copy travel plans onto handheld devices or PCs.

CULTUREFINDER Next time you find yourself in a strange city with some free time, check out this site. CultureFinder lists arts and cultural events including jazz, opera, classical music, and plays from 1,500 arts organization and 180,000 performance listings in more than 550 cities in the U.S. Coming this fall: An online discount ticketing service.

VISTO Forget bulky Filo-faxes and handheld PCs. At Visto.com, the exec on the go can keep track of appointments via the Net. The site lets you copy address and calendar information, E-mail, and other files from your PC to the Web. That way, all the information is kept together and you can get to it no matter where you are—all you need is a Net connection and your password. The service costs \$10 a month and \$99 a year.

grand total of 180,000 performances, including jazz, opera, classical music, plays, and more. The site (www.culturefinder.com) also has reviews and news and is just the service for people who are landing in a city and looking for something to do at the last minute.

KITSCH WATCH. Landing unprepared can happen more often than not. That's why it pays to bookmark a list of what may seem like kitschy sites that can prove more useful than you think. The Weather Channel's Weather.com site is just the thing for people who either don't have the cable channel in their ho-

entire layout of the globe from satellite shots. Chip Austin, the CEO and president of Bertelsmann's BOI.com, says Terraserver is a favorite of his, since he likes to get aerial overviews of cities (www.terraserver.microsoft.com). Austin lives in New York, though he works there only two days a week while shuttling between Britain and Germany.

International travelers such as Austin can find a bonanza on the Web. Many sites offer information in English. But there's also a bounty of international sites including portals, such as the

vee/pd/atm/main.html) to avoid wandering around unfamiliar streets. Services such as Oanda, which offers data on 164 currencies and is published by market-forecast technology developer Olsen & Associates Co.'s Internet unit, makes gazing into bank windows to get exchange rates a thing of the past (oanda.com).

But beyond travel and reservation planning, one of the most worrisome problems is keeping up with E-mail,

other files from your P the Web. That keeps all data together and lets u share calendars, files,

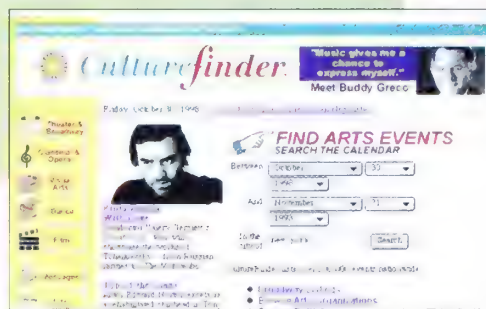
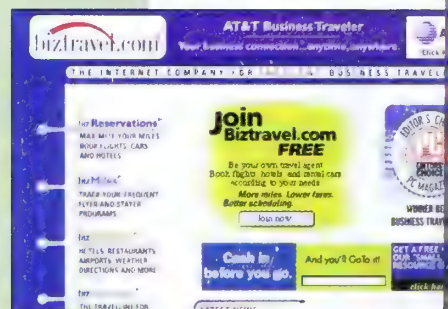
spreadsheets friends or colleagues.

Other handy vices are available Amazon.com Inc. recently bought a vice similar to V called PlanetAll (planetall.com), and hoo! offers a sin Web-based calendar. Travelers also can

Atrieva Corp.'s backup vice to place files onto Web for later retrieval (www.atrivia.com).

Of course, the upside the Web is also its downside. It can keep travelers v all the time. That could a little less time for aire meandering through known cities. Then, again, could make things run smoothly, freeing up tim the harried traveler.

By Heather C
in New





ROMEO AND JULIET -
GO AHEAD - GET HITCHED.
WE JUST WANT YOU KIDS
TO BE HAPPY.



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ASSISTANTS FOR THE DIGITAL LIFESTYLE

They provide unified messaging—with or without attitude

I have spent the past several weeks interviewing a series of assistants. You know, someone to take on menial but important jobs: placing calls for me or screening them, knowing my schedule and finding me in a pinch, fetching my E-mail from my various accounts, and faxing important messages to my home or hotel. Some of the candidates even volunteered to read messages to me on my commute to work, or when I'm driving between appointments. That's no small time-saver when you live in Los Angeles.

But these aren't the ordinary temps sent over by an agency. These are "virtual personal assistants"—computers programmed to recognize and respond to your voice and those of your contacts. Think of them as unified messaging services for the very mobile—professionals who need their messages consolidated in a single place but who can't safely punch in touch-tone prompts on a wireless phone while driving, much less open up a laptop computer. At \$150 to \$250 a month—more if you're a sales executive who spends two to three hours on phone calls without a break—they're not cheap. But they still stand up well when compared with the salary and benefits tab of a full-time human assistant.

I loved them all. I auditioned Portico, the brand-new assistant from General Magic Inc.; Webley, the oh-so-proper



HELP FOR THE VERY MOBILE

Virtual personal assistants will track you down, screen your calls, and even read you your messages

British butler from Webley Systems; and Wildfire, the grandmother of personal assistants from Wildfire Communications Inc., who has been on the job since 1994.

All of these services depend wholly on speech recognition to respond to your requests. For the most part, they get it right the first

time. If not, they take full responsibility for the misunderstanding. There's no more of the "please speak more clearly" of past speech-recognition systems. Instead, Portico will say something like, "I'm sorry. Let's make sure I've got this right." Wildfire once asked me whether I thought the problem was a

bad connection and early told me that she found it easier to understand if I spoke in a natural voice.

The idea, for all these services, resembles conventional unified messaging. You hit out a single toll-free phone number to all your contacts. Then you tell your assistant where to forward your calls. The assistant, however manlike, is nothing but software running on a computer server that you access via telephone. General Magic and Webley Systems manage their own computers; Wildfire leases its software to a wireless telephone company. **BLAST OFF.** They can all deal with complicated instructions. For instance, you can tell them that you'll be at your mobile number for the next hour, then unavailable for two hours at a client meeting, and after that you can be reached at your hotel. Wildfire has a feature—"blast"—where he'll call you at four different phone numbers simultaneously and help up the others when you answer one of them. In all cases, your assistant will tell you who's calling and call you to ask whether you want to take a call or have it take a message. If you're using a service to place a call at a time, they'll quietly interrupt you and whisper the name of the new caller in your ear.

It's easy to log on to these services and run through your daily routine. When you're listening to voice mail, you just say "give the call" and they'll retrieve the number from Caller I.D. or your address book to return the call. They all allow you to create an address book so that you can call anyone you want just by saying the name. Wildfire lets you do this on the fly, by telling the assistant to add a contact she has already identified through Caller I.D.

Portico and Webley have Web pages with a window where you can type in pu

TIP: Pay close attention to experience and personality, as you would with a human assistant



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address book—a good project for your human assistant. Portico claims that it can import your current contact list from a number of popular PIMs (personal information managers), but when I downloaded the software, I discovered that it only works with Rex, a credit-card-size device that holds contact lists and calendar information. Even though the services match your voice to a typed—not spoken—rendition of your contacts' names, I had no problem asking them to call people with Hispanic or Japanese names.

In the middle of these trials, I made a five-day trip to Chicago and left my address book at home. The hotel switchboard didn't recognize the new 877 toll-free area code that Portico assigned me—but otherwise everything went fine. I had wanted to leave my laptop, too, since in theory, both Webley and Portico (but not Wildfire) can pick up E-mail and read it over the phone.

But it's a good thing I brought my laptop. E-mail retrieval on these services is somewhat overbilled, as it is with most unified message services. Assistants can't break through corporate firewalls, where I get the most urgent E-mails. Also, the synthesized text-to-speech voice that reads fax headers and E-mail messages to you in the car is hard to understand, compared with the assistants' normal voices, which are recorded by real-live actors. And right now, only Portico can retrieve E-mail from America Online Inc.

DOUBLE DUTY. Both Webley and Portico were very reliable when it came to my EarthLink account, my other Internet service provider. Portico picked up messages every couple of hours and stored them; Webley went online only when he heard me say "check my E-mail." If Portico had already retrieved it, Webley found

nothing there—but that wouldn't have been a problem if I'd only had one ISP.

Despite the grating synthesized voices on the E-mail readers, these assistants make it easy to weed through messages and delete the spam. Or you can order the systems to "send a reply." They will record your response and send it as a voice attachment to the outgoing E-mail. My friends

rely on voice recognition for hands-off commands. Even backseat passengers will be able to play games or surf the Net on screens such as those found in airplanes.

The first step in this direction is an ambitious effort by Microsoft, called the Auto PC, which brings a whole new meaning to the ad slogan "Where do you want to go today?" Initially, Auto PC will be an onboard computer that

able through Ford deal.

Compared with Auto, however, personal assistants have one big advantage: They do not require any fancy hardware, other than a telephone.

If you decide to hire a virtual assistant, pay close attention, as with a human one, to experience and personality. For me, Wildfire was the easiest to deal with. While the other services use a human on the phone to train you, you deal with Wildfire alone from day one. She does the tutorial, and you get comfortable with her, offers an occasional "friendly word of advice," she puts it, to help streamline your session. What a comedian. Tell you're depressed, and she has a repertoire of clever retorts. One of them: "Gee, Now I'm a therapist."

DRAWBACKS. Unlike Portico and Webley, you can't interrupt Wildfire while she's talking. But her voice prompts are supposed to gradually fade away as you get familiar with the service. On the other hand, Wildfire's inability to handle E-mail and fax messages is a real drawback. If you want those things—and they are nice to have—I'd go with Portico.

Like everything else in the world of computing, these may save quite a bit of money if you wait. I tested a beta version of Myosphere, a system designed by Motorola Inc. as an add-on for wireless carriers, which will be much cheaper than today's stand-alone systems. Mobility just started offering Wildfire for \$13 to \$15 (U.S.) a month in certain parts of Canada. And this year, my own Pacific Bell Mobile Services will offer Wildfire in Southern California for \$15 a month on top of its calling plan. Guess who's getting there from me?

By Larry Armstrong
in Los Angeles

What You Get from Virtual Personal Assistants:

PORTICO. 1-800-PORTICO Manages all voice communications, E-mail, and faxes. Has news and stock-quote features. Truly hands-free operation.

Cost: \$19.95 (60 minutes) to \$149.95 (1,300 minutes) monthly. Additional minutes: 15¢. Charges for inbound and outbound calls. No long-distance surcharges.

WEBLEY. 1-888-4-WEBLEY Handles all voice communications, E-mail, and faxes. Mostly hands-free (requires use of * and # keys).

Cost: \$14.95/month plus 14.9¢/minute. Charges for incoming conference calls. No surcharge for long-distance calls.

WILDFIRE. 1-800-WILDFIRE Integrates voice communications only. Hands-free operation.

Cost: New version available through wireless carriers for as little as \$15 a month.

loved this aspect, responding with notes saying "way cool" and "ain't technology wonderful." And while we're on cool features, Webley can create a conference call when he hears "add a caller." Portico, meanwhile, gives you the ability to call up stock quotes and news on companies, though "Circuit City" resulted in a quote for "Circus Circus." (It worked the second time.)

Someday, personal assistants will simply be a feature in your car. Today's cars already boast dozens of microchips under the hood. But soon your car's dashboard may sport a PC that can tap into a broad range of information services delivering directions, traffic reports, and E-mail messages. Most will

hold the driver's address book and permits voice-activated calling over a cell phone. Eventually, the system will let drivers retrieve voice mail, E-mail and numeric pages, subscribe to services that will send news and traffic alerts, and surf the Web by voice.

The first version of Auto PC will be available by the end of the year as part of a \$1,299 car stereo cassette player from Clarion Co., a leading auto-components maker. Other companies, including Ford Motor Co.'s Visteon unit, another components maker, plan to introduce Auto PC products next year. Clarion will be selling its system at electronics retailers. Visteon's system will be avail-

Chaos is all around her.

Good thing answers are right in front of her.

(In online lab reports, X-rays and MRIs.)

She's connected to all of it.

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WHERE DOES THE BUCK STOP AT CITI?

Sandy Weill fired his heir apparent. And that's only part of the management disarray

It was in late October that long-simmering tensions came to a boil—on the dance floor. Some 150 executives of Citigroup were attending a corporate retreat at the Greenbrier resort in White Sulphur Springs, West Virginia—the first time they had all come together since the Oct. 8 merger of Citicorp and Travelers Group. It wasn't any secret to the assembled that relations between James Dimon and Deryck C. Maughan, co-chief executives of Salomon Smith Barney, Citigroup's investment bank, were rocky.

To help heal the rift, one of Dimon's top lieutenants asked Maughan's wife, Va, to dance, says one witness and other sources. Maughan, however, did not return the gesture. Dimon's lieutenant, who thought that Maughan had insulted his wife by not inviting her to

dance, confronted him. After the two men began arguing, Va Maughan and Dimon got involved, exacerbating the argument. A Citi spokesman disputes the incident, and Dimon and Maughan won't comment.

Whatever the exact details, tensions between various factions have been wracking Citigroup for months. Just days after the retreat, the bickering exploded into public view. John S. Reed, 59, and Sanford I. Weill, 65, the co-CEOs of Citigroup, asked for Dimon's resignation on Nov. 1. Sources in the Dimon camp say Weill decided to fire him, while Weill loyalists insist that it was Reed who made the call.

SHOCK. In the ensuing shake-up, Maughan was kicked upstairs: He's now a vice-chairman. No one was named to fill Dimon's place as president. And a sur-

prising team was installed to run Salomon Smith Barney and Citicorp's corporate businesses: Michael A. Carpenter, a Travelers executive best remembered for being blindsided by a \$350 million trading scandal when he ran Kiddy Peabody & Co., and Victor J. Menezes, a careful Citicorp veteran who is known as a survivor of Citibank's fierce political warfare.

The rapid-fire moves left everyone from Citigroup shareholders to Salomon Smith Barney employees in a state of shock. The latter were especially perturbed by the decision to replace Dimon and Maughan with Carpenter. In fact, Citigroup's shares have lost \$9 billion in value since the announcement (chart, page 181). Says Sanford C. Bernstein analyst Sallie Krawcheck, "Investors are asking two questions: What



AFTER DIMON'S FALL

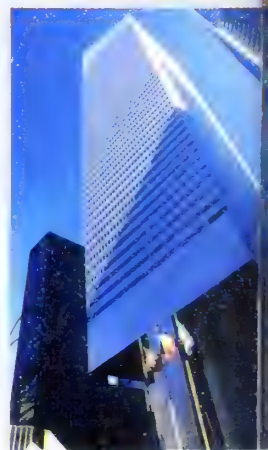
The deal of the century looked great in April, but now it's beginning to look messy

HEAVY AX

By firing Dimon (left), his own well-regarded protege of 16 years, Weill has risked his reputation for stable management and well-executed takeovers

MARKET TURMOIL

The severest global-market tumult in decades is hammering Citigroup's trading-oriented units, complicating reorganization



CULTURE CLASH

Hopes that Travelers corporate culture will bring stability to the top management at Citigroup now appear naive

ld I do with my Citigroup shares where is Jamie going next so that I buy the stock?"

beyond the executive shuffle, the its help reveal that the so-called "deal he century" is in trouble—plagued turf battles, culture clashes, unset-decisions on strategies, and general use. It looks as though Weill is test-the limits of his highly successful and onal management style. The ques-is whether that style is appropriate running a global financial-services smoth.

espite Dimon's popularity with emees and investors, Weill believes he n't being effective. He says efforts to bine the corporate businesses of corp and Travelers, for which Di-was responsible, had stalled. "It n't coming together," Weill told BUS-S WEEK. "We weren't where we ted to be."

ecording to the Dimon camp, there another side to the story. Weill sim-didn't want his protege around any e. Something had gone terribly ag in a close, personal relationship had flourished for the better part of ears—and that Weill once described lled with "a lot of love."

ut there were serious tensions. Last , for instance, Dimon eased out l's daughter, Jessica Bibliowicz, who Smith Barney's mutual-fund busi-

LOSING STEAM



ness. That, apparently, was an impor-tant factor in Dimon's undoing. "It is such a colossal error in judgment to have a dispute with anyone's kid, espe-cially Sandy's kid," says someone close to the Weill family.

Weill, who spoke from his new Citi-group Manhattan office, which is domi-nated by a photo of his boyhood home in the Bensonhurst section of Brooklyn, is confronting what may be the toughest challenge of his professional life. The Citigroup deal, Weill's brainchild, was supposed to herald a new era in global finance by melding together a U.S. bro-kerage and insurance giant with an in-ternational banking powerhouse. In-stead, Citigroup looks like a corporate soap opera that may be three to five

years away from fulfilling its promise. "Sandy, for the first time, perhaps ever, appears to be at sea," says one longtime Weill watcher.

Weill has made himself and his in-vestors enormously wealthy by managing a sprawling U.S. conglomerate as if it were a small family business. Like an old-fashioned Wall Street partnership, he meets regularly and socializes with his team of top lieutenants. "He's always run it like his own mom-and-pop candy store," says one ex-insider.

"RUBE GOLDBERG." Several management consultants, a breed Weill has always shunned, say it may be hard to run Citi-group in such a personal way. Adds Peter C. Davis, a consultant at Booz, Allen & Hamilton Inc.: "You have an existing organization which is by definition a Rube Goldberg contraption at this stage. You've got to detangle the organization to sort out what services get delivered to what client when."

In the past, shareholders have turned a blind eye to Weill's belief in nepotism (his son is chief investment officer at Citigroup) and his practice of hiring in-dustry outcasts. Why? Simply because everything he has touched has turned to gold. But Weill may have a harder time sticking to his management style because of his partnership with Reed.

To the Street, Carpenter is inexper-rienced and ill-equipped to run such a



MUSICAL CHAIRS

The executive suite is in turmoil with Dimon's resignation as Citigroup president and his replacement by two relative unknowns, Carpenter (left) and Menezes (below). More departures could fur-ther weaken Citigroup



WARS

n months after the er was announced, oup has yet to ine corporate ng franchises. ions about turf, s, and duties— o mention strate-remain unclear



ABOVE THE FRAY

Reed (above) has been offstage, giving Weill the limelight. Meanwhile, the rank-and-file are adrift

huge operation. He has "a little bit of an iffy sort of background," says James K. Schmidt, portfolio manager of the John Hancock Financial Industries Fund. But Weill is convinced that Carpenter is a talented executive who can fill both Dimon's and Maughan's shoes. Weill also says that he and Reed will play a much more active role in running Citigroup day-to-day.

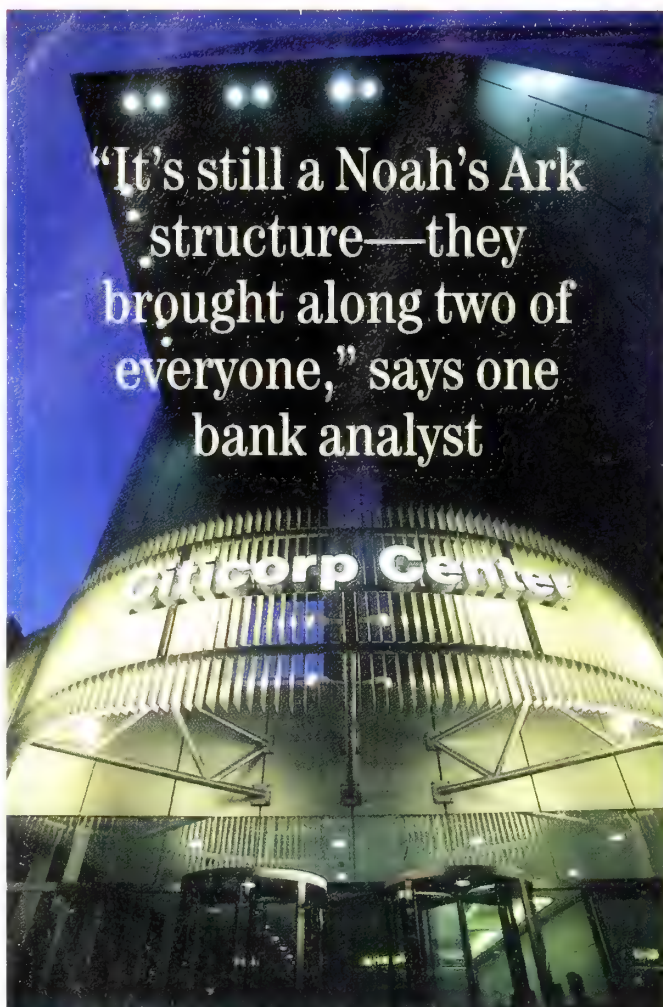
Carpenter will now oversee all of Salomon Smith Barney, as well as Citigroup's private bank that serves wealthy customers around the world. In addition, five major business lines, some of which used to be at Citibank, report to Carpenter: equities, fixed-income, foreign exchange, derivatives, and structured finance. "When I joined Travelers Group this was not something I had in mind," says an elated Carpenter. "It wasn't something I had in mind a week ago."

To many, though, the real winner is Reed. With Dimon in place, the conventional wisdom was that Reed would leave in a few years and Dimon would run the show. Now, however, insiders believe that Reed, six years younger than Weill, will run Citigroup next.

The irony of the shake-up is that it might indicate Weill and Reed can work together. "This was a decision we made together, that was very hard," says Weill. A fund manager who owns shares in Citigroup says the shake-up shows that Weill is sending a message that he is "going to be just as harsh with the people who work for him as the people who work for John."

But some wonder whether Reed will trump Weill. Says one management consultant who knows both men: "If it came down to one of them, I'd bet on Reed. He is the cleverest, canniest streetfighter in the known world."

For now, the turmoil at Citigroup is far from over. Employees at Salomon Smith Barney were stunned by the changes, since many considered Dimon their leader. Some senior Dimon loyalists may follow him out the door, Weill says. "This is an organization of dukes and earls. If your liege goes, unless you can quickly find a line of authority and loyalty to someone else,



"It's still a Noah's Ark structure—they brought along two of everyone," says one bank analyst

you're gone too," says one insider.

Nor will all the departures at Citigroup be voluntary. "There will be layoffs, but don't look for any cataclysmic kind of thing," says Menezes. Maughan adds that the eventual number of people to be let go will probably be most dependent on the economic environment.

DEAL-WEARY. Dimon has his detractors. Salomon Smith Barney suffered huge trading losses in the third quarter. "I'm not a subscriber to the 'colossal loss' theory," says one Salomon Smith Barney insider, noting that Dimon lacked international experience, as well as a conceptual strategy for the big thorny issues such as globalization and technology. A consultant adds: "He has lots and lots of years to learn before he'll be ready," to run a large company. "I'd say it would take eight years."

The broader question is whether Weill and Reed can succeed in fashioning two very different cultures and businesses into one cohesive organization. It's possible that Weill may have bitten off more than he can chew. In less than a year, he has spent \$9 billion

acquiring Salomon Inc. announced a \$70 billion merger with Citicorp, and spent \$1 billion to buy 25% of Japan's Nikko Securities Co. The result: Deal-weary Travelers managers have been completing several mergers simultaneously, all as world financial markets tanking. "The real issue is the rate of speed at which this stuff was put together," says Carole S. Berger, partner at Berger Jacobson Capital Management. Travelers to buy Salomon and then do the merger with Citicorp within the same year is a very tight thing."

In the meantime, the merger doesn't stop anywhere in particular at the biggest financial company known to mankind, not at all clear who's running the show. "It's still a Noah's Ark structure—they brought along two of everyone," says Michael L. Mayo, bank analyst at Credit Suisse in Boston. "You still have heads of consumer banking, co-heads of corporate banking, co-heads over the entire company. It doesn't make sense to have that many chiefs."

Dimon's departure disappointed investors looking for signs that Citigroup management was taking a coherent shape. Schmidt, a portfolio manager who owns Citigroup shares, says he was hoping Weill's team would take control because of Travelers' reputation for aggressive cost-cutting. But he says he would settle for any clear chain of command and is disappointed one has yet to emerge. "We are at a stage we should have been six months ago," he says.

It was hardly surprising that the elements should develop on the investment banking side. In conception, the operations of Travelers and Citicorp together better. The premise in consumer banking is that Citigroup can offer products to existing customers. It can be as simple as mailing Citicorp credit cards to Travelers policyholders. However, Weill said, "When it came to the corporate side, we were talking about who was going to be in what position rather than how do we get this together."

In firing Dimon, Citigroup officials maintained they were speeding up

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integration of corporate-banking operations. But that's going to be tricky. There will be different brand names for corporate-banking products—including Citi and Salomon Smith Barney. Salomon Smith Barney will remain a separate entity. And, in Citigroup's Noah's Ark fashion, Carpenter and Menezes will have different areas of responsibility. "We are operating as co-chief executives, each one of

which has primary areas of responsibility," says Menezes.

Ultimately, cost-cutting may be the name of the game. Investment analysts are pinning their near-term hopes on Weill's old-fashioned reputation for prudence. Raphael Soifer, banking analyst at Brown Brothers Harriman, expects Citigroup will trim enough expenses to increase earnings by \$1 billion in two

years. "You will have a company that spends more than \$40 billion a year. If Sandy Weill can't take a billion after that, he's not Sandy Weill," Soifer. Indeed, for all the big ideas that went into forming Citigroup, the success of the deal could hinge simply on making the whole operation smaller.

By Leah Nathans Spiro and Gary Sherman in New York

COMMENTARY

By Paula Dwyer

SOMEONE HAS TO BE THE BOSS

They would succeed where others had failed, promised Sanford I. Weill and John S. Reed, former chairmen of Travelers Group Inc. and Citicorp, and now co-chairmen of the newly merged Citigroup. The insurance-cum-securities company and the global consumer bank would create a financial supermarket and cross-sell to each other's customers. Together, they would employ 160,000 people and serve 100 million customers in 100 countries. On paper, at least, the strategy seemed sound, and Wall Street rang with huzzahs.

But more than one management expert predicted failure, and not because they doubted the giant group's ability to bring superior salesmanship and brand marketing to financial services. Instead, they doubted that Weill and Reed could smoothly rearrange their corporate structures into one. The first hint: when the two leaders pronounced their combo a merger of equals and agreed to share power as co-chairmen and co-chief executive officers. Such arrangements rarely work, management experts say, and cause big problems down the road. "As soon as I heard that neither company would dominate, I knew they were in trouble," says University of Northern Iowa professor David A. Whitsett, an expert on organizational cultures. Adds David A. Nadler, chairman of New York-based management consultants Delta Consulting Group, "John and Sandy took care of their big emotional issue by agreeing to be co-CEOs. But my concern is whether proxy battles are being fought down the chain over which side is going to take control."

Now, with the abrupt departure of

Jamie Dimon, the well-respected president of Citigroup and former aide-de-camp to Weill, power sharing's flaws are beginning to show. By all accounts, Weill and Reed get along well. But their inability to control their followers has led to turf battles and confusion over which corporate culture will predominate.

At Citigroup, will it be the fast-moving, aggressive dealmaking cul-



ture of Travelers—especially the Salomon Smith Barney investment-banking unit that Dimon headed—or the more conservative culture of a large commercial bank characterized by long-term customer relationships? "OIL AND WATER." The question is not academic. Important changes—how compensation will be determined, which business unit will have overall control of an account, which side will bear the brunt of layoffs to cut the company's costs—rest on which culture the group wishes to follow. Says Benton E. Gup, a finance professor at the University of Alabama: "It's almost impossible to bridge the differences, and just putting the two under the same umbrella doesn't mean it's going to work." One or the other's culture eventually will dominate, adds Gup, so it's best to choose a single leader to set the tone from the outset.

And it wasn't just Weill and Reed who were sharing responsibilities. The model was mimicked down the line, with a triumvirate of Dimon, former Salomon Brothers CEO

Deryck C. Maughan, and Victor J. Menezes, former chief financial officer at Citicorp, overseeing the integration of Citicorp's corporate-banking division with Salomon Smith Barney. Here, Dimon took most of the heat for failing to integrate the parts and not resolving the inevitable battles over turf.

Citibankers, who have relationships with large multinational companies, naturally wanted to maintain those contacts and didn't want to be subsumed into the investment bank, which also served corporations but had little presence overseas. Salomon's pros, meanwhile,

scoffed at the idea that commercial bankers with little bond-underwriting expertise could take the lead in emerging-market fixed-income deals. Meshing the corporate-client businesses was always viewed as one of the most difficult parts of the merger, but it was made doubly so for Dimon, who had to make decisions that both Weill and Reed were unwilling to make. "The two cultures are like oil and water," says Jeffrey C. Hooke, a former investment banker at Lehman Brothers Inc. who has written about the challenges of making mergers work. "I always thought it was a recipe for disaster." Hooke says mergers are more successful when companies don't pretend to be equals and one has the power to make the tough decisions.

Is power sharing a fatal flaw? That's unlikely for a company the size of Citigroup. But the financial giant may never live up to its potential until it decides who's top dog.

Paula Dwyer writes about financial services from Washington.

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NEAR-TERM PAYOFF AT LONG-TERM CAPITAL?

The markets start to benefit the hedge fund's new owners

It's too soon to say for sure, but there are signs that the worst may be over for Long-Term Capital Management, the Greenwich (Conn.) hedge fund that got creamed by bad guesses on the markets in August and September. Volatility in stock and bond trading has declined, and the spreads between safe and risky securities have narrowed. If those trends continue, Long-Term's bets will begin to pay off, and the companies that took over the fund in September will have a profitable investment on their hands.

Long-Term Capital's executives won't comment for the record on how well the fund is doing or divulge precisely what's in its portfolio, so any assessment of where it stands necessarily involves some guesswork. Although it's unlikely, it could be that the fund is sitting on some undisclosed positions that continue to deteriorate. It's also possible that the world's financial markets will once again sink into crisis. Indeed, a source close to the fund says, "I wouldn't be quick to hoist up the flag that the fund is out of the woods."

"BETTER SHAPE." But this same source says that the fund is in "a lot better shape" than it was in a few weeks ago. And the available evidence supports that contention. The markets have finally begun moving in a direction that plays into Long-Term Capital's core strategy. While the fund tries to keep its specific investments secret, some of

its holdings have leaked out. What's more, its broad strategy is public knowledge. Its managers have said in letters to shareholders and in public statements that they were betting on, in essence, an improvement in the health of markets. That is, they made long-term bets that price fluctuations would shrink; that confident investors would increase their appetite for relatively risky securities; and that markets would be liquid—that is, there would be plenty of bidders around whenever someone wanted to sell.

For a while, those bets went disastrously awry—so much so that the original owners of Long-Term Capital Management ran out of money to meet all the margin calls and demands for collateral they were faced with. On Sept. 23, under the auspices of the Federal Reserve Bank of New York, 14 big banks and brokerage firms injected \$3.6 billion to keep Long-Term Capital afloat and received 90% of the partnership's

equity in return. But even that didn't stop the bleeding. Things continued to get worse after the takeover. Spreads got wider and volatility increased.

But more recently, things have begun to turn the other way (charts). For instance, it's believed that Long-Term Capital privately sold large numbers of

options in the debt and equity mar-

kets, figuring that it could sell them back cheaper and clear out its position at a profit.

The assumption was that option prices would rise because market volatility would decrease. Bad guess.

As markets went crazy, option prices shot up to historic levels. More recently, though, volatility has begun to recede.

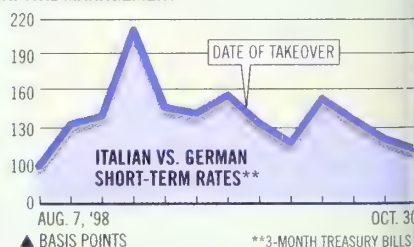
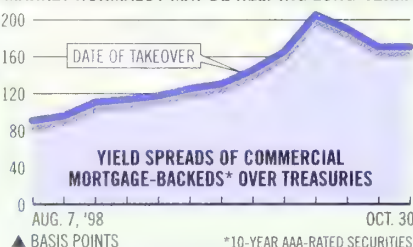
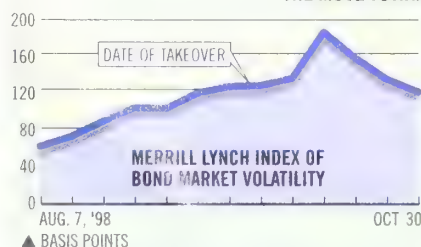
the bond market (see chart) as well as the stock market (page 188).

Market p



A TURN IN THE RIGHT DIRECTION

THE MOVE TOWARD MARKET NORMALCY MAY BE HELPING LONG-TERM CAPITAL MANAGEMENT



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- Peter Lynch

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*This mix will vary over short-term periods within defined ranges: stocks can range 30-70%, bonds 20-60%, short-term / money market instruments 0-50%.
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the portfolio Long-Term dumped at fire-sale prices.

Another gamble that went bad for Long-Term: a bet on the convergence of short-term interest rates in Europe before the Jan. 1 move to a common currency, the euro (page 186, right chart). Italian and German three-month Treasury rates, which had been slowly converging, diverged dramatically at the end of August. Since then, they have returned to the differential of midsummer.

Several other indicators seem to signal better days ahead for Long-Term Capital. Liquidity is coming back, narrowing the unusually wide yield differ-

entials between new 30-year Treasury bonds and older, less traded, issues. (Long-Term had bet on a narrowing of those spreads and was hurt when they widened.) Prices are returning toward their typical alignments. "Slowly but surely, we're seeing the notion of relative value return to the market," says a risk manager at a Wall Street firm that's not part of the LTCM ownership consortium. Indeed, it's hard to find a single market that's continuing to go in the wrong direction from Long-Term's perspective.

The new owners appear to be in better shape than the original owners in two ways: They bought into Long-

Term's positions cheaply, and they have deep enough pockets to ride out the month in which things got worse.

Indeed, the biggest problem of Long-Term Capital's original owners was that they built their massive positions primarily on borrowed money and didn't have the financial staying power to weather deep pockets—to live up to the moniker's promise of hanging in for long term. The new owners, some of the world's biggest financial institutions, look as though they'll be able to keep Long-Term Capital's bets in place. If the markets keep going in the right direction, the payoff could be sweet.

By Peter Coy in New York

OPTIONS

TOO MUCH FEAR IN THE CHICAGO PITS

For once, option traders welcome a calmer market

When markets swing with blood-curdling abandon, terrified investors fret, pray—and buy options to hedge their investments. So it was during the market's wild ride in the first nine months of 1998, when options volume on the Chicago Board Options Exchange climbed 14% over the year before. But what would ordinarily be a blessing turned out to be a curse for options traders, who usually profit from active markets. Options prices rose so sharply and for so long that professional traders had trouble coping. Many of them withdrew from the market, fearing that they were taking on too much risk.

Well, something resembling normalcy has returned to the options markets in recent weeks. Since Federal Reserve Chairman Alan Greenspan's surprise second interest-rate cut on Oct. 15, and the market rally that followed, there has been a steep decline in options prices. "All of a sudden, the pressure is off," says Thomas P. Haugh, an options trader and owner of PTI Securities.

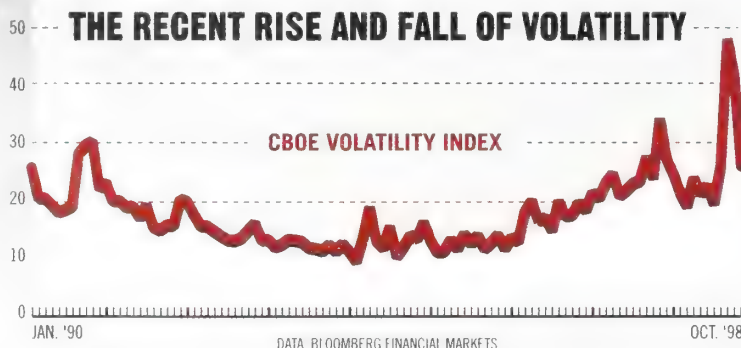
The return to business as usual in the options pits can be seen in the "fear index"—CBOE's closely followed Market

Volatility Index. VIX measures volatility indirectly—not by measuring the swings in the underlying stock market, but rather how those swings are reflected in options prices. It tracks the prices of put and call options on the Standard & Poor's 100-stock index, which are traded on the CBOE floor. (The VIX itself cannot

the VIX shot up from 26 to 40. In 1987 crash, the VIX soared to 120. Similarly, the invasion of Kuwait and other international market tumult generated rises in options prices in recent years (chart). But in all those earlier cases, the volatility subsided in a matter of weeks. This summer, the fear was different. "I've never seen a market where volatility levels have gotten so high and stayed high," says John R. Power, director of the Options Institute and a former trader at the CBOE for 17 years. **SIDELINED.** As a result, betting on a return to normal volatility was a losing game during the summer market malaise. The VIX shot up to 30 in early August, but instead of declining, it stayed high and then climbed even higher, as investors stampeded to buy

options to protect their stock portfolios. At the same time, however, hedge funds and trading desks were selling options. Stung by losses elsewhere, they sat on the sidelines. By the end of the month, the VIX was nearly 50.

Since Greenspan's rate cuts, the VIX has quickly dropped to more normal levels. At 26, it is still higher



be traded.) When markets are stable, investors see little need to buy options to hedge their investments, so prices are low. But when markets go nuts, prices go through the roof. That is particularly true when markets are unstable for long periods. "The crash of 1987 was a walk in the park compared to this," says Jon Najarian, founder of options trading firm Mercury Trading.

What made the recent turmoil so unusual was its duration. On Oct. 27, 1997, when the Dow plunged by 587 points,

the historical average of 20, and above the recent low of 16 on July 1. But the fall in volatility has brought a lot of players back to the market.

The question is: How long before the next shock sends them for the exit again? "People are now getting complacent," says Kevin L. Murphy, options strategist for Salomon Smith Barney. "Maybe it's over, but if the market goes again, volatility will spike back up." So will the fear on the trading floor.

By Andrew Osterland in Chicago



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BY GENE G. MARCIAL

BIG BETS ON MODINE AND AEROQUIP

Investor Mario Gabelli thinks the next bull run will be in euroland—and that's where he has been setting his sights. He believes Europe will be a vast growth market for U.S. companies after European Monetary Union takes effect on Jan. 1, 1999—when the euro becomes the common currency for 11 nations. Gabelli is betting not on the large U.S. multinationals but on mid-cap industrial and technology plays.

High on his list: Aeroquip-Vickers (ANV), a worldwide producer of aerospace and automotive components, and



GABELLI: He sees a euroland bull run

Modine Manufacturing (MODI), a maker of heat exchangers that are used for cooling transmissions, engines, hydraulic gear, and in other automotive applications. Gabelli, head of Gabelli Funds, has taken an 11% stake in both companies.

Aeroquip rose to a high of 72 in mid-May and then weakened, along with other automotive and aerospace issues. The stock slumped to 22 in early October. But since then, Aeroquip has rallied, rising to 30 on Nov. 3. Aeroquip serves markets that are expected to boom in the new Europe, says Gabelli, who sees the price rising to 65. Aeroquip will opt for "some kind of financial engineering—or merger," to prepare for European growth, he predicts. That, he adds, should boost Aeroquip's value even more. Analyst James McCann of Merrill Lynch expects Aeroquip will earn \$4 a share in 1998, up from 1997's \$3.51.

Modine traded at 37 in late April and has since dropped to 31. But Gabelli figures the stock is worth 60. He notes that the demand for Modine's climate-control systems has been on the increase in both the U.S. and Europe. Modine's foreign operations accounted for 31% of 1998 sales of \$1 billion. "Its euroland operations will

benefit Modine substantially," says Gabelli. Analyst Michael Braig of A.G. Edwards expects earnings of \$2.70 a share for the year ending Mar. 31, 1999, and \$3.15 in 2000, up from \$2.39 in 1998.

RED ROOF: WHO'S CASING THE JOINT?

Shares of hotels and motels have been shunned by investors all year. So why is Red Roof Inns (RRI) on the upswing? The largest U.S.-owned economy chain, Red Roof saw its stock sag—from 17 in late August to 13 by Sept. 4—along with hotels in general. But Red Roof has climbed back to 17 lately. There's buyout talk. "The company is being informally shopped," says one industry executive.

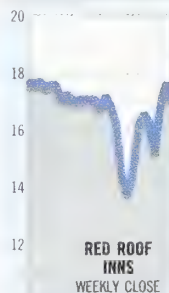
Red Roof was bought by a group led by Morgan Stanley in the early 1990s and was taken public in 1996. The group still holds a 66% stake: Morgan Stanley Real Estate Fund owns 45.9%, and Morgan Stanley Real Estate Investment Management owns 19.7%. Another group, Longleaf Partners, holds 7.1%.

"Morgan Stanley isn't in the hotel business, and Red Roof is an asset it should not logically own for the long term," says the hotel executive. He thinks the replacement value of Red Roof is about \$30 a share.

Bailey Dalton, an analyst at CIBC Oppenheimer, agrees. But she points out that the estimate does not include the potential of Red Roof's widely recognized but underfranchised brand name. She argues that such an asset should add a premium to the stock price. Red Roof plans to open 20 franchises in 1998 and 50 per year thereafter with the ultimate goal of 1,000 inns, notes the analyst.

On the business side, Red Roof, which has announced a 1 million-share stock buyback, is doing well—beating analysts' estimates by posting second-quarter earnings of 51¢ a share, vs. 45¢ a year ago.

THE WELCOME GETS WARMER



DATA: BLOOMBERG FINANCIAL MARKETS

WILD OATS: IT MAY BE TIME TO REAP

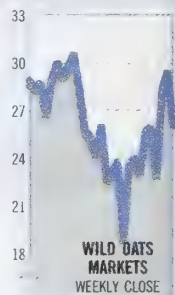
Wild Oats Markets (OATS) isn't your run-of-the-mill food chain: It specializes in natural foods. And every Wild Oats shopping bag bears the home phone number of CEO Mike Gilliland, seeking comments or questions about this No. 2 natural-food supermarket. Now, it appears that No. 1 Whole Foods Market may call Gilliland about a buyout. Although the two are bitter rivals, Whole Foods may be interested in Wild Oats "for practical business considerations," says one New York investment manager who has snapped up Oats shares.

"That may be how the rivalry plays out," says Gary Giblen, managing director at investment firm First Albany. Shares of Oats have risen to 26, from 17 in early September. Meanwhile, Whole Foods stock has dropped to 43 from 70 in late March.

"Wild Oats has proved its resilience to competition from Whole Foods," says Giblen. Wild Oats operates stores in Canada and the western U.S. The natural-foods business produces high margins but is fiercely competitive, he notes. In 1996, Whole Foods acquired the third-largest chain in the business, and Wild Oats bought the fourth-largest. Between them, they control 12% of the market, with Whole Foods more than twice as large in sales. Sales of natural foods amount to \$14 billion, or just 3% of all grocery sales of \$375 billion.

Based on its earnings growth alone, Oats is worth 37 a share, Giblen says. He expects Oats to earn 89¢ a share in 1998 and \$1.55 in 1999, up from 1997's 64¢. A Whole Foods spokeswoman says the company is always looking for acquisitions, but she wouldn't comment about Wild Oats.

MAKING HAY



DATA: BLOOMBERG FINANCIAL MARKETS

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GORDON CONWAY, GREEN REVOLUTIONARY

head of the Rockefeller Foundation, he's leading search for more benign answers to world hunger

Thomas Malthus, it seems, was wrong. Lately, birth rates have been slowing around the world, even in developing nations. In-
—until the latest Asian economic—have been rising. And global food s, thanks to meteoric gains in pro-
vity over the past few decades, are rally being met. In the 20th centu-
echnology has saved the day.

ill, a stubborn 20% of the people eveloping nations are undernour-
l. And even with slowing birth e, the world's population is slated
ow by 3 billion by 2025. Even to unniest of seers, that's a daunting
ect. Can these people be fed?

ordon Conway, a British-born agri-
ral ecologist whose ideas on how to ve sustainable agriculture have ind
a generation of ecologists, says can. It will require high-tech con-
tions from genetic engineering and ech contributions from ecologists
farmers, he says. And people and utions that are often at logger-
s will have to find common ground.

ORDER. It will require, in short, a d green revolution. The first, be-
ng in the 1960s, boosted food out-
with new crop varieties and a gen- s dose of chemical fertilizers and
icides. But there was a cost: The icals ravaged the environment. In
ook *The Doubly Green Revolution*, dy published in Britain and to be
shed in the U.S. in the spring of

Conway advocates a new agricul-
revolution that would ly enhance crop yields for
poor—as the first green eution did. But unlike the first rev-
n, it would do so in a way mindful
ological and social concerns. tall order for sure. But it's a cause
Conway, as the new president of
Rockefeller Foundation, is in an ex-



CONCILIATOR: Genetic engineers and farmers must find common ground

cellent position to champion. One of a handful of major foundations with a global perspective, the philanthropy has long supported scientific research, and fully 56% of its 1997 funding commit-
ments went toward agriculture, health, population, and the environment. The foundation sup-
ported the agricultural research of No-
bel laureate Norman E. Borlaug and spread the gospel of the original green
revolution, which blanketed Asia with
new crop varieties and fertilizer to boost
yields and feed millions in the 1960s

Ideas

and 1970s. Thirteen years ago, the Rockefeller Foundation launched an ambitious rice biotech program, which has yielded everything from a "map" of rice genes to the development and introduc-
tion of *la fen rockefeller*, a high-yielding strain grown around Shanghai.

These activities have given Rocke-
feller influence and standing beyond its size—it ranks ninth among major found-
ations in total giving, disbursing \$116
million in 1997, well behind No. 1 ranked
Ford Foundation. "There's no doubt that
they've been absolutely central to in-

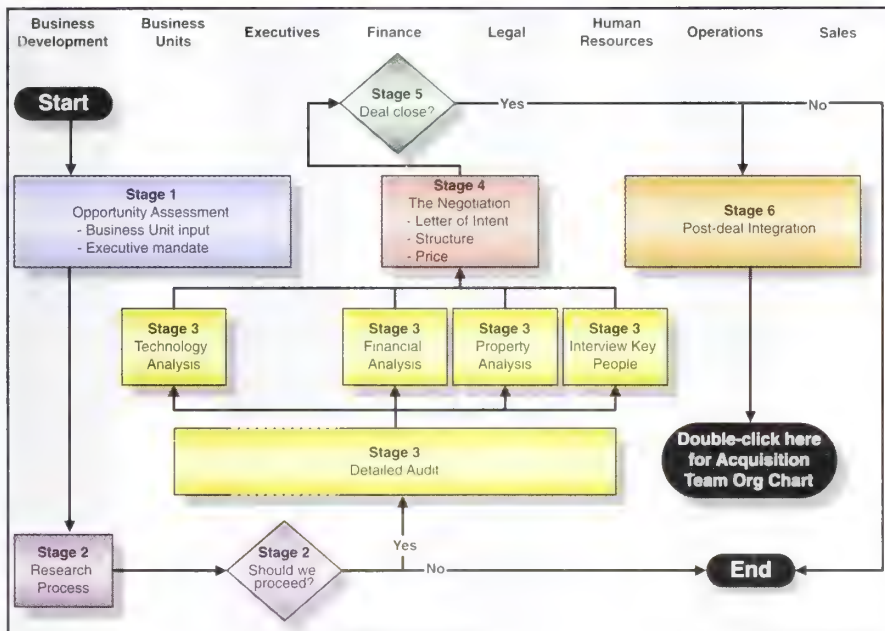
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Acquisition Strategy



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Conway advocates alternating a limited use of pesticides with the introduction of the pests' natural enemies

ternational agricultural development," says W. Ronnie Coffman, associate dean at the college of agriculture at Cornell University. The foundation's mission, of course, is a broad one—to sustain and enrich the lives of the poor—and its activities range from promoting the arts to financing urban school reform.

Conway, 60, was vice-chancellor at the University of Sussex in Brighton, England, before joining Rockefeller and was previously the Ford Foundation representative in India. For many years, he taught and wrote about sustainable agriculture. "He's a great leader," says Jules Pretty, director of the Center for Environment & Society at the University of Essex, who has worked with him. "He's very good at making links across disciplines."

It was Conway, working as an ecologist 37 years ago in Borneo, who homed in on the Achilles' heel of the green revolution: He argued correctly that widespread application of pesticides had destroyed not only crop pests but also the predators that feast upon those pests. The result was that crop losses continued in many places. Conway said that reintroduction of the predators could resolve the problem.

In the years since, Conway refined this approach, which came to be known as integrated pest management. He suggested that crop yields could be raised by rotating crops and alternating the limited use of pesticides with the introduction of the pests' natural enemies. Similar techniques may be applied to use of nutrients. In the 1980s, Conway and other ecologists also pioneered ways to draw on the skills of farmers, who have detailed knowledge about local growing conditions, rather than simply directing the farmers to use the new plant varieties.

HARSH CONDITIONS. But these approaches alone won't boost output enough over the next couple of decades. Hence the need for new biotech solutions. Many ecologists and development experts worry, though. Will developing-world crops, with limited commercial potential, be neglected by researchers? Most bioengineered plants available today are "not appropriate for poor farmers," says Miguel A. Altieri, agricultural ecologist at the University of California at Berkeley. They are too expensive and are often

designed for use with expensive chemical pesticides or nutrients.

Conway advocates biotech solutions, but with a difference: Plants should be engineered to make them more able to grow in harsh environments—not in such a way that they require more chemicals. Research should focus, for example, on bioengineered plant varieties that can withstand drought and grow in salty and degraded soils. It's likely that such research will be conducted mostly in labs in developing countries, especially in the global net-

A SECOND GREEN REVOLUTION?

Researchers propose a "doubly green revolution" that would boost food output and protect the environment. It will require a three-pronged approach:

- Genetic engineering of new crops to improve their resistance to pests and their tolerance of drought, salt, and poor soil
- Better farm-management techniques, used as alternatives to overdependence on pesticides, herbicides, and fertilizers
- Reliance on the special knowledge of farmers, who should be welcomed as innovators and experimenters

DATA: GORDON CONWAY, BUSINESS WEEK

work of 16 research centers known as the Consultative Group on International Agricultural Research (CGIAR), because multinationals shun such research as uncommercial.

At the same time, developing countries should protect their own breeding resources by licensing and patenting them. Otherwise they are likely to be swept up and patented by firms and researchers in the industrialized countries, Conway says, and others agree. "Once, we had an open-access system, when there was free access to knowledge," observes Ismail Serageldin, chairman of the CGIAR. "Now, everything's patented. O.K., that's the new reality." CGIAR—which is supported by numerous governments, international agencies, and the Rockefeller, Ford, and W.K. Kellogg Foundations—is considering new patent policies and ways to license material to Western researchers.

To Conway, it is essential not only that developing countries protect their intellectual property and resources but also that they have access to improved

seeds produced through biotechnology. At the moment, such access is limited. In Vietnam, for instance, Novartis Seeds Inc. is giving away a gene that produces insect resistance in sweet potatoes, one of about half a dozen or so such arrangements the company has. says Willy De Greef, head of regulatory and government affairs at Novartis Seeds. There will be more such deals in the future, predicts De Greef.

CATALYST AND PROD. The Rockefeller Foundation itself has plowed more than \$80 million into studying applications of biotechnology to rice. "Gene mapping of rice was way behind that of wheat, corn, and soybean," says Ray Wu, professor of biochemistry and molecular biology at Cornell University and a recipient of Rockefeller grants. Today, says Wu, that gap has been closed. The foundation acted as a catalyst and prod, using a panel of experts to monitor results and getting researchers together about every six months. Rockefeller allowed license in the rice program to license technology to the private sector in Western markets but required them to make their findings freely available to developing countries.

Now the foundation may focus on crops that get less attention—cassava, sorghum, and millet. Another idea is to promote farm-management analysis in Africa—devising low-tech strategies for farmers to boost their yields. Above all, the object is to get a high payoff with a small investment and spur others to do more research.

The foundation is already doing that with medical research. Next year, foundation officials plan to help launch a decade-long venture to develop antimalarial drugs in which the World Health Organization, some government foundations, and pharmaceutical companies are expected to participate. The foundation will likely kick in only \$1 million or so. But by prodding others, it hopes to solve a problem the private sector hasn't undertaken. "The main role of a philanthropy is to be experimental, to try out new ideas," says Conway. If Rockefeller's new president moves this process along, he and the foundation will help forge 21st-century solutions to an age-old problem: how to feed and improve the lives of the poor.

By Karen Pennar in New York

NETWORKED Meetings



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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.



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1998

Using Electronic Meetings Now

by Elliot Gold

The last thing you need is another meeting. "Meetings In America," authored by InfoCom and described in this special section, indicates that while we attend an average of more than 30 meetings a month (traveling to only 25% of them), 90% of us admit to daydreaming during some of them, and 40% admit to falling asleep. It's time we changed the way we meet.

TeleSpan Publishing Corporation (www.telespan.com) reports that change is already underway—we're already migrating towards networked meetings, and we're using

electronic meetings now. In 1998, there will be 13 million electronic meetings, including conference calls, videoconferences, and data conferences, up from 10 million electronic meetings in 1997. Small by comparison to our total meetings, but powerful in their outcome.

On the following pages, an array of electronic meeting tools and services are described, with users defining how they've increased their productivity. As you read through the section, you'll see how these tools allow others to meet critical deadlines they couldn't meet any other way.

And these tools are being purchased and used. TeleSpan's data indicate that more than \$6.4 billion was spent on electronic meeting tools and services in 1997, with all segments growing by double digits in 1998. TeleSpan's Web site features many of these tools in the TeleSpots area.

Use this special section as a guide to help you change the way you meet. It describes the products and services you've been dreaming about, and which your competitors may already be using.

Lucent Technologies

www.lucent.com/conferencing



Lucent Brings Meetings to Your Office

Cup of coffee in your hand, some Java on the screen, your fail-safe telephone beside you, and you're

into a day full of productive meetings.

Total travel time to join your teams around the building, around the country,

around the world?—the

time it takes to click your mouse and get another cup of coffee.

"Our offerings are focused on how people work together, whether within a company, or between a company and its vendors and cus-

tomers," says Karen Long, marketing director at Lucent Technologies. "Our technology supports dispersed teams for ad hoc or regularly scheduled meetings without having to be in the same room.

Key to our technology,

though,

is that they're always on the same page."

Rely-

ing on Bell

Labs techno-

logy, Lucent's

product portfolio

includes the OneMeeting™

Solution, an integrated software package that links a customer's existing telephone set, PBX, and voice telephone network with the customer's already-deployed PCs and local area network (LAN) infrastructure. Nothing revolutionary here—the phone works, the PC works, and the networks that carry voice and data are kept separate. Phone calls are completed without



Interception, while the data pipes continue to flow with solid corporate information. Lucent's philosophy?

Why fix something that ain't broke.

If you have a Lucent DEFINITY™ (communications server, or one of the many other TSAPI-compliant PBXs), OneMeeting allows you to set up a meeting on the fly. Put more simply, if you can place a three-way voice call, you can place a six-site electronic

*"How can our teams share information
more efficiently with each other,
our customers and suppliers?"*

C



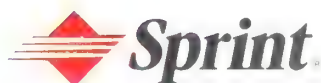
collaborat^{ion}

Fulfilling the potential of true collaboration
in business today requires the real-time
sharing of audio, video and data with all

Integrated On-Demand Network

employees, customers and suppliers.

And new Sprint ION,SM Integrated On-Demand Network, is the innovative communications platform that will provide the secure, high-speed information links you need with guaranteed quality of service. Sprint ION facilitates collaboration so your business can realize increased product quality and improved speed-to-market. Sprint ION will offer a significantly more efficient total communications solution, leading to a dramatic change in the way your business does business. www.sprint.com/ion



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meeting, complete with high quality voice on everyone's phone and crisp shared documents on everyone's PC screen. OneMeeting relies on your existing Internet browser. A few clicks of a mouse, and your team members have traveled, nonstop, to your desk. Going beyond six locations doesn't require a boarding pass, as Lucent has conferencing equipment available to bring together many more locations. And, after a day full of productive meetings, you can go home without having to wait for the seat belt sign to go off.

If you have videoconferencing equipment in your office or your conference room, Lucent's MultiPoint Conferencing Unit (MCU) allows you to meet with and see 16 other locations, all on your screen at one time. If you want to flatter one site, you can even put it in Lucent's new "Panoramic View" on everyone's screen.

Toyota, one of the world's largest manufacturers of automobiles, and a longtime user of satellite delivered video, switched to a Lucent manufactured and serviced terrestrial videoconferencing network two years ago. The reason? "Toyota has a proclivity to partner with suppliers that take the time to understand our business," says Craig A. Wakatani, telecommunications director, Information Systems Toyota Motor Sales, U.S.A. "Video is so dynamic that when there's a problem, our executives want it fixed immediately. Since we switched to terrestrial ISDN, it's more stable, and we gained the benefit of using Lucent's technical staff."

Virtually any equipment you need, be it voice or video, for the office or conference room, used over a local area or global network, Lucent and its partners have it in stock. Their advantage over the others is Bell Labs technology. No one else has that.

Lucent is in the meeting business.

Sprint Conferencing

www.sprintbiz.com

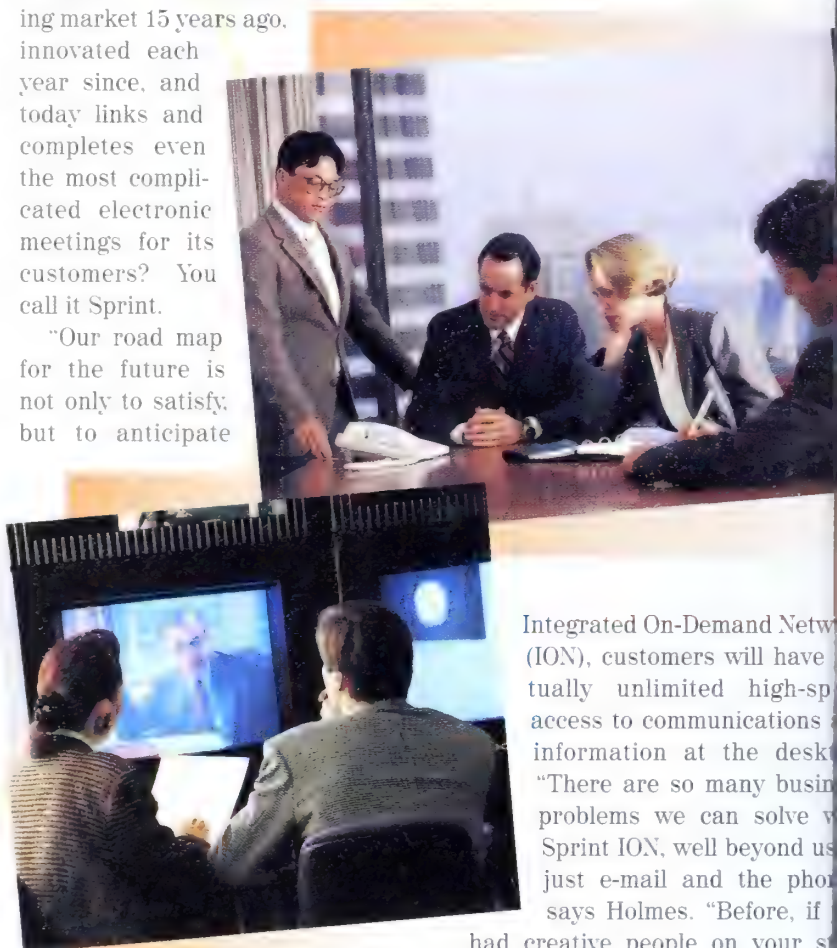


A Network Delivering Any-to-Any Communications

What do you call a company that defined the conferencing market 15 years ago, innovated each year since, and today links and completes even the most complicated electronic meetings for its customers? You call it Sprint.

"Our road map for the future is not only to satisfy, but to anticipate

for help. To beat the competition, businesses must bring the people together who can solve problems regardless of their geography. With Sprint's multi-functional network, customers can instantaneously assemble teams to solve problems. So with the implementation of Sprint



Integrated On-Demand Network (ION), customers will have virtually unlimited high-speed access to communications and information at the desk. "There are so many business problems we can solve with Sprint ION, well beyond just e-mail and the phone," says Holmes. "Before, if

you had creative people on your staff, they were islands. Now they are a shared resource."

our customers' requirements," says Amy Holmes, group manager conferencing services for Sprint. "We were the first public videoconferencing provider, have a decade of experience in audioconference calls, and were one of the first to allow our customers to set up and run their own calls over the Internet."

Sprint's network-based services begin with a simple premise: people cannot meet ever more demanding deadlines by working only with those they can tap on the shoulder to ask

In the area of audio conferencing, Sprint's customers no longer have to wait to reserve a conference call or wait for an operator to greet them when they're under tight deadlines. Through Sprint Personal Conferencing™, team members have individual access codes, allowing them to securely and immediately join a conference call from office, car, home, or in mid-flight from a plane. With Personal Conferencing, a team can work until the problem is solved, without fear of being knocked

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MULTIMEDIA CONFERENCING SOLUTIONS. Your people are in different buildings (cities, time zones, continents). What's it going to take to share ideas and information as effectively as if everyone were sitting in the same room? Video, data and audio conferencing solutions from Lucent Technologies. We offer a complete range of products, from videoconferencing that supports up to 25 remote participants, to group videoconferencing, to network-based voice and data solutions. All with Lucent expertise and quality. It's the productive way to meet when everyone can't get together (cost-effective, saves on Danish). For more information, get face-to-face with your Lucent account representative. Or just call 1-800-221-1223 ext. 444. **We make the things that make communications work.**

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off the call by others requiring meeting resources. Calls can be completed around the global clock, seven days a week.

With the Sprint Internet Conference Center, callers have the advantage of their own on-line phonebook to click and dial out to team members, as well as access to a database of more than 110 million public listings. With the QuickCall feature, team members can be added even while the call is in progress. And there's a separate but parallel built-in link to the Internet or a corporate intranet, allowing participants on the call to have access to and share information, without disrupting the quality of their voice call.

Sprint's Video Conferencing Service Bureau, a benchmark for the industry since it was launched more than 15 years ago, continues to lead with its "any-to-any" networking capabil-

ities. To enable its customers to deploy video conferencing even deeper into the organization, Sprint now sells or rents the Polycom line of inexpensive, yet highly functional video systems. Sprint's total videoconferencing solution includes equipment, installation, maintenance, transport/network, and service bureau.

If there is a meeting need, Sprint's network can solve it. If your employees' shoulders are tapped out, Sprint has the tool set to provide high-quality, innovative solutions for your collaborative meeting needs.

VTEL

www.vtel.com



Digital Visual Communications — A New View for Videoconferencing

For those of you tired of ordinary videoconferencing systems that seem to require a doctorate to operate, help is on the way. VTEL raises videoconferencing to a higher level

with its Digital Visual Communications technology. Digital Visual Communications allows you to bridge the gap from where you are to where you want to be—digital and in real-time.

"Our major goal is to make the user experience better and simpler," says Stephen L. Von Rump, chief marketing officer of VTEL. "Most important, we are working at making the user interface more comparable, in function, to the Internet browser they now use. Even if people aren't technically savvy, they can navigate around the network using the browser. VTEL envisions the same ease of use for its entire product line. This way, a user can walk up to a VTEL system and intuitively establish a videoconference with little or no previous experience. That's where we want to take the end user."

With more than 15 years' experience, VTEL provides enterprise-wide digital visual communication solutions, regardless of the network.



Both of these men are traveling 2,000

Fired of scurrying through airports? Bleary-eyed meetings? Missing your family? On-net from MCI WorldCom has the answer: Global conferencing. We can provide everything you need for your meeting—audio, video, or text conferencing or a combination of all three. We'll even provide the latest video equipment. No matter how

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company uses. This is important today as organizations are under pressure to migrate their data, telephones, fax machines, and videoconferencing systems to what is called Internet Protocol, or IP. The plan is to have all communications devices share the same common "pipe"

their current network. The problem is that, while mail and corporate data can arrive at their destination within minutes, voice and video have to arrive now. Not a problem for VTEL customers, because of VTEL's inherent investment protection. "When you move to this IP world, with all of its



advantages, you still have to function," says Von Rump. "Most likely, customers will be in a hybrid world between the old networks and the new ones for some time to come, and will want to switch over without swapping out hardware, which could cause work stoppages. What's unique to our

enterprise-wide solution is that all of this is done through software. That's the hallmark of our systems."

As VTEL's customers go through a natural migration from one network to the other, they have VTEL Professional Services at their beck

and call. These trained professionals can help with installation, maintenance, as well as follow-through consulting. And, if customers like, they can outsource their entire digital visual communications network to VTEL.

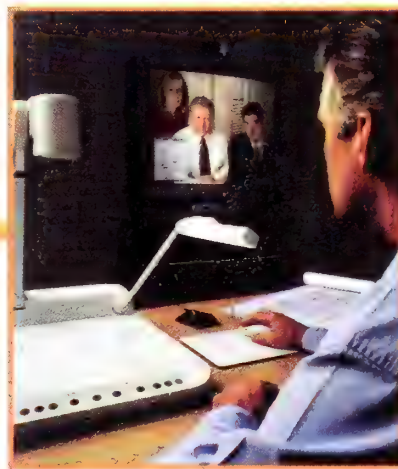
Are customers content with this approach?

"Videoconferencing is exciting for us because of the incredible opportunities it offers students in remote areas," says Kath Murray, program coordinator for Australia's Victoria School of Isolated and Distance Education. "We're very grateful to VTEL's team for extending their experience and knowledge to help us develop our videoconferencing program."

And does this approach work?

"In its first year of operation, KPMG's videoconferencing training

meeting. Which one would you rather be?



MCI WORLD COM

...ive your needs, we can handle it. And if there's ever a concern, we have people ready to assist you. 24/7. ...e changing the way the world meets. So you can get where you have to go. Without ever really having to... go. ...Voyage. Introducing MCI WorldCom On-Net. For details, visit mciworldcom.com or call 1-800-475-3555.

After years of televising contact sports and soap operas, business meetings are a natural.

Whether your meeting includes high drama or non-stop action, Sony will make sure you don't miss a moment of either with our family of videoconferencing systems. These systems bring Sony's proven audio and video quality to the cost-effectiveness and efficiency of videoconferencing. Our flagship product, the Sony TriniCom® 5100PLUS



features an autotracking camera and Quartet® built-in multi-point capability. Which means you can link up to four sites at one time as well as annotate shared documents. And guarantee high ratings for all your meetings. For more information, call 1-800-472-7669, ext. BW.



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with Quartet™ built-in multi-point

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TriniCom 5100PLUS System



TriniCom 3000PLUS System



TriniCom Digital Meeting System



TriniCom 500 Series



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work, the Knowledge Channel, offered 105 programs to 9,500 participants," says Jeanne Joslin, director of distance learning at KPMG Marwick. "The firm saved more than one million dollars in travel and lodging costs while providing employees with access to knowledgeable speakers. Now in our second year, we are adding new sites, and delivering increasingly strategic programs to a larger number of participants."

For the customer looking for easy-to-use, networkable and feature-rich solutions for their distance meetings, the choice is VTEL.

MCI WorldCom Conferencing

NMC.MCI.Com

Sobering Thought

Ninety percent of the people who attended your last meeting, the ones you expected to follow through on goals you set during the meeting, have admitted to daydreaming during recent meetings.

Worse, 40% say they have dozed off, maybe while you were talking.

So suggest the results of a study conducted this year by InfoCom for MCI WorldCom. The study, entitled "Meetings in America," had another boot to drop—one-third of surveyed professionals say their meetings are unproductive.

And in-person meetings were rated as only slightly more productive than conference calls or videoconferences.

And news if it was one of the meetings you held.

"Organizations are wasting an enormous amount of time and money on ineffective meetings," says Tim Reedy, vice president of marketing and finance at MCI WorldCom Conferencing, the fastest growing conferencing company in the world, according to TeleSpan Publishing Corporation, which tracks such growth. "We want to change the way the world meets."

Lofty goal? Maybe, but MCI WorldCom is doing something to attain it. For each account, the company assigns specialists whose job is to help make customers' meetings more productive, from initial planning to evaluation of goal attainment.

These conferencing specialists come at meetings, both those held face-to-face and those held electronically, not so much with technologies as with processes. "First, you need to understand the reason for the meeting. Then you can determine the most appropriate medium," says Lisa Silverman, director of marketing. "Conferencing isn't a one-size-fits-all replacement for in-person meetings. However, it can be a strategic business tool to help organizations increase productivity, communicate more effectively, and reduce travel costs. The industry's growth is a testament to this."

MCI WorldCom's customers include some of the world's leading multinational companies. Last month, one of them held possibly the world's largest call, with 6,750 locations. The call allowed the chairman to introduce his successor to the entire company at once.

For those who can't attend every meeting, MCI WorldCom offers



Instant Replay Plus. As simply as calling in to the live version of the audioconference, busy professionals can call in to a recording of the call and listen to all or part of the meeting, using an array of functions such as fast-forward and

replay. Soon, MCI WorldCom will begin to offer a similar replay function for videoconferences, which can be viewed from the convenience of a PC, thanks to the Internet.

Makes you wish you could do this for ordinary face-to-face meetings.

For large complicated calls, MCI WorldCom provides its customers with a Meeting Manager, a coordinator who can manage the entire meeting process, from planning to follow-up. Armed with the findings of the "Meetings in America" study, the Meeting Manager's job is to make meetings productive, eliminating roadblocks, even the ones introduced by the very technology MCI WorldCom adds to make the meet-

NETWORKED Meetings

ings more productive. "The users aren't technically savvy, and don't want to be," says Reedy. "They just want to hold a productive meeting, regardless of the medium."

As a result of working this closely with customers, MCI WorldCom is diligently adding new service offerings to match their meeting needs. Already, the company offers a powerful service that enhances an ordinary conference call with the ability to view and share documents electronically. Called Net Con-ferencing, the service automatically delivers the same draft of documents, slides, graphics, and spreadsheets to everyone's PC screen, viewable through an ordinary Internet Web browser.

So even if some meeting participants are daydreaming, MCI WorldCom is wide awake and taking action now.

Sony Electronics

www.Sony.com/Professional



Vide Conferencing by Sony, Naturally.

Four years ago, PeopleSoft, the second largest software company in the world, numbered 300 employees. By the end of 1998, that number will grow to 7,000. According to Neil Hennessy, PeopleSoft's director of global telecommunications, there is only one communications alternative when it comes to managing that explosive growth—Sony videoconferencing. Only a few years since the company began, PeopleSoft has deployed 30 Sony TriniCom videoconferencing systems in its offices around the world.

"We're a California company trying to extend our corporate culture around the world," Hennessy says. "You can break down social and cor-

porate barriers with video, because it's simply better when you meet someone over video than the phone. There's a bond that is created, especially with international calls. Video makes it a totally different meeting. It's much more like a live meeting."

There simply isn't a consumer or business electronics system that doesn't have the Sony name on it somewhere, including the most innovative videoconferencing systems in use around the world today. The reason for that is simple. The Sony tradition of intuitive-to-use, feature-rich, and exceptional quality is inside each and every TriniCom videoconferencing system.

The range of applications with Sony's products point to productivity, revenue gain, business. For manufacturing to remote medical diagnosis. Sony offers scalable line videoconferencing systems for all needs.

"Our customers have learned that they have a complete product line, available around the world, suitable for any size or application," says Andrew Mougis, senior vice president of applications for Sony Electronics. "Sony can leverage its experience to make products which are revolutionary for the needs and budget of any organization."

Research has long shown that users of videoconferencing want to meet in groups, linking people coming in from more than just two locations at the same time, in multipoint conferences. Naturally, Sony broke new ground when it was the first to add this capability into its videoconferencing systems.

Sony's flagship system, the TriniCom 5100 Plus, has a built-in feature called Quartet that allows four different locations to meet at once. With Quartet, users can meet regularly without the need for additional costly equipment or services. It's

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SHOULDN'T
BE
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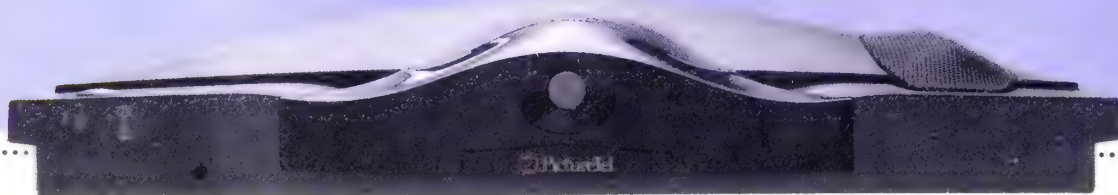
Hmm. Interesting question. But let's say you don't want to spend a fortune bringing people in from all over, or wait days or weeks until everyone's schedules allow them to all be in the same room at the same time. Then, it's kind of a no-brainer. And definitely a job for what we like to call videoconferencing that's been raised to a higher level.

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NETWORKED Meetings

well," says Sony's Mougis. "What differentiates Sony is that we provide affordable systems which are easy to use, naturally."

Polycom

www.Polycom.com



Polycom Delivers It All and Makes It Easy to Use

Polycom, famous for its state-of-the-art, easy to use and affordable meeting appliances, has expanded its line of "Swiss Army knife" video, data, and audioconferencing products to serve all meetings, whether face-to-face,

over conference calls, videoconferences, or through networked collaborative systems.

WebStation, Polycom's most recent dataconferencing product, is a network appliance that connects LCD projectors with the network, allowing meeting participants to share documents, spreadsheets and presentations whether they are in the same room or attending from a remote site. "If you can use the Web browser on your computer, you can use WebStation just as easily in your conference room," says Bob Hagerty, Polycom's president and CEO.

The magic of WebStation is that with its access to corporate networks and the Internet, presentations can easily be sent to WebStation's "server," where they can be viewed via a conference room LCD projector, both locally and at remote sites. One WebStation can connect up to 25 remote locations,

while several, "cascaded" together, can bring in hundreds. And all of WebStation's powerful presentation performance is available for just \$2,999.

Even more basic than sharing the same document in a meeting is hearing and being heard clearly. How often have you been on a conference call, trying to deal with annoying clipping, echoes, and howling?

"The trick is to always rely on high-quality, full-duplex audioconferencing so that you don't have to second-guess what's being said or heard," says Hagerty. In delivering unsurpassed full-duplex audioconferencing quality, Polycom has sold more than 300,000 of its market-leading SoundStation and SoundPoint conference phones at prices beginning at \$249.

Polycom's new SoundPoint Pro desktop conference phone extends Polycom's patented corporate-quality audioconferencing capabilities to the desktop, in addition to providing a full business phone feature set and multi-line functionality, all in an elegant, compact business phone.

Delivering videoconferencing "the way it was meant to be," Polycom has broken down price barriers with a line of ViewStation group videoconferencing systems featuring industry-leading prices from \$5,999 to \$11,999.



ion for Sony customers that acts more than half the cost of multipoint meetings.

ie model for videoconferencing angling now, with prices going in direction where Sony products ally dominate. Systems are now able for small conference rooms fices at under \$10,000. As one d expect, Sony is there with the Com 3000. This \$5,995 videoconferencing system comes stan-with a 22-inch television moni-oll-about cart, and Trilogy built-altipoint, a function that allows e locations to meet simultane-; without additional equipment.

it not all organizations are con-to boardrooms. For the mobile

Sony's TriniCom Digital ing System converts a personal otebook computer into a small p video and data conferencing m in minutes. At a price point ing at only \$2,495, the system gs the power of collaboration out stealing any processing r from the PC.

ist as we're in everyone's living s, we're in their offices as

NETWORKED Meetings

ViewStation provides high-quality video and audio, along with true ease of use and standard features like an embedded Web server and voice-tracking camera, all in Polycom's trademark compact set-top design.

"Because ViewStation is so intuitive and easy to use, it insulates users from the videoconferencing technology and allows them to focus on a more natural way of communicating," says Hagerty. "Technology isn't the focus of meetings—decisions are."

Another plus ViewStation brings to meetings is its ability to add participants who don't have videoconferencing. ViewStation comes standard with audio add-on, allowing callers to attend meetings via an ordinary telephone, cellular phone, or in-flight phone.

Videoconferences today are often multipoint, linking more than two locations. Polycom's latest videoconferencing system, the ViewStation MP, can link users from as many as four video locations. No need for extra equipment or a service bureau—multipoint videoconferencing is as easy as point-and-click with ViewStation's remote control.

Polycom just makes meetings more productive.



PictureTel

www.picturetel.com



Leading the Visual Collaboration Parade

A band of new vendors is now marching in the videoconferencing parade. Like any marching band, though, there has to be a leader, one setting the tone for all others to follow. Since 1986, one has consistently led the others with a dozen years of firsts. PictureTel has installed more than 65,000 group videoconferencing systems around the globe. With nearly 40% of the systems in use today, PictureTel sets the pace others march to.

"PictureTel is the only vendor in the business with a full line of group, compact, and desktop videoconferencing systems, multi-location servers, and a full suite of maintenance and professional services," says Steve Chambers, vice president of marketing for PictureTel. "This complete capability makes us unique in the industry. That's why PictureTel is the partner of choice to help the world's largest multinational companies manage their complex communications needs."

PictureTel's focus is not on videoconferencing or talking heads. It's on giving customers the tools to help them remove the barriers of time and place. Offering customers much more than just videoconferencing, PictureTel's visual collaboration solutions help business people work and collaborate with colleagues anywhere in the world from their desktop or a conference room.

Possibly the two most important tools to come to the market recently have come from PictureTel. First is SwiftSite II, the industry's first second-generation compact conferencing system. This compact class product delivers to customers virtually all of the functions found in competitors' larger, more expensive systems, but adds the highest quality audio found in the business, and a "tracking" camera that automatically

focuses on the speaker within meeting. All of this at list price ranging from \$5,495 to \$10,500.

The second new benefit to customers is the incorporation of "streaming video" in PictureTel's product line. Streaming multimedia enables businesses to extend the power and reach of visual collaboration to the millions of Net-attached PCs around the world. By streaming the content of a videoconference, a virtually unlimited number of locations can receive the same visual message from existing desktop and conference room videoconferencing systems. This functionality comes from PictureTel's acquisition of StarLight networks, announced earlier this year.

PictureTel's customers are in the business of making cars, pharmaceuticals, machinery, and thousands of other products. They don't need to be in the business of running videoconferencing systems. That's why PictureTel offers a complete suite of enterprise services to help customers use and manage their visual collaboration technology. This includes everything, from installation and repair, to the complete management of complex, international multi-point calls.

"So much of the way people communicate is nonverbal," says Chambers, "from the raised brows of surprise, to the nod of agreement, to the furrowed brow of confusion. All of these expressions and the myriad gestures and body language that we all use are lost when you're on a telephone

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or sending e-mails. With visual collaboration, you enjoy the full experience of meetings, where people see and hear all of the feedback being given. It's the natural way to meet."

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The Sweet Spot of the Market

Philips, one of the largest electronics companies in the world, with sales of \$39 billion in more than 60 countries, is about to open the business videoconferencing market. Just like it did in the consumer electronics market, it will do this by going to the right spot.

"Our products target the sweet spot of the market—small conference rooms where business today works" says Robert Visser, general manager of Philips Videoconferencing

Systems. "Like our parent, we provide affordable, hassle-free systems. That's our differentiator."

"Affordable" is an understatement. Philips is offering a full line of integrated videoconferencing systems at prices from \$2,595 to \$8,495, or about one-third what similar systems cost only a year ago. And the low-cost systems made by others last year were actually personal computer board sets, requiring that buyers be skilled enough to open their PCs, insert cards, and then get their PCs



to work again. The only requirement of the Philips MatchView line of videoconferencing systems is that customers know how to open the box it comes in.

MatchViews are veritable set-top boxes, which sit on top of, below, or alongside a television monitor, operated by a simple TV remote. No need to open your PC. In fact, there is no need to have a PC—just a TV. In a couple of color-coded color-coded buttons, grab the remote, and you're meeting with colleagues, solving business problems.

The MatchView brings this simplicity to even the most novice user. For example, if you accidentally

Multimedia Multipoint Control Units



www.compunetix.com

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Tandberg

www.tandbergvision.com



For Productive, Hassle-free Videoconferencing

"We see videoconferencing as something that should be as simple to operate and as reliable as a telephone call," says Bengt Thuresson, President and CEO, Tandberg.

"Our systems are designed so that all you have to do is 'dial' the number and five seconds later you have complete communication facilities. The entire system is controlled by a remote that is designed to be as familiar as the one you use with your TV. In this way, a meeting held via videoconferencing is as natural as a regular meeting and allows the participants to conduct their business the same way they would in a face-to-face meeting."

Tandberg's Vision 5000 large group videoconferencing systems come with a set of features that makes meeting participants both productive and comfortable. Tandberg has even developed the W.A.V.E. (Wide Angle View) Camera, that delivers a wide angle image so viewers at a distant site can see everyone at the other end at the same time.

Pomeroy Computer Resources is a Tandberg customer with 1,800 employees distributed around the United States. Pomeroy uses Tandberg systems to bring its geographically distributed branch offices closer together and to enhance the communications between them. "The benefit we've seen is the simplicity and ease of use," says Robert

Magenheim, business development manager for Pomeroy.

Another Tandberg customer, which launches an average of 120 new products a year, used to introduce them at six-month intervals during

face-to-face company-

wide meetings. Now,

because the new products

are shown to the sales force

through a large videoconfer-

encing network, products can

produce revenue virtually right

after they are developed. The

Vision products have been credited with

reducing the time-to-market by up to

six months.

Atle Tangen, who manages 55 Tandberg systems for Norsk Hydro, a Norwegian manufacturer with 37,000 employees worldwide, describes the advantage of using the Vision system internationally. "I had two meetings in Germany today, and was at home by 4:00 p.m."

Maybe that's why Tandberg has installed more than 20,000 of its systems in more than 80 countries.

COMPUNETIX

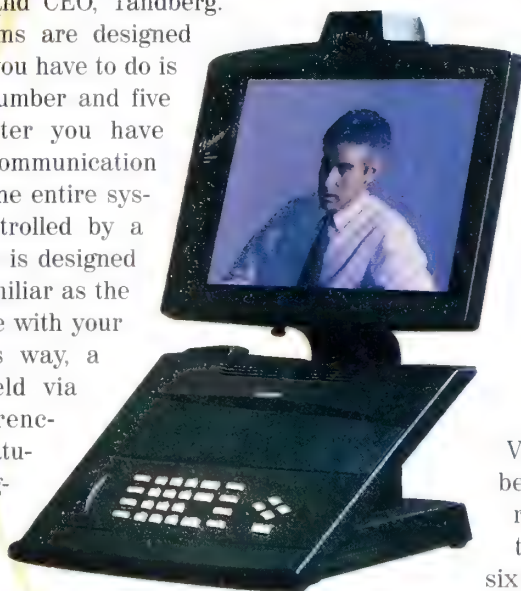
www.compunetix.com



The Technology of Collaboration

Ever tried to organize a night on the town with a group of friends? How many phone calls did it take to come to a consensus? How many call-backs? How much easier would it have been having everybody on the line at the same time?

It has become second nature to government agencies, educational



NETWORKED Meetings

Special Advertising Section

institutions, and corporations around the world to rely on conference calls. Believe it or not, meetings held over the telephone are now, by their sheer volume, almost as many as those



held face-to-face. Of course, it didn't just happen without help. Someone had to provide the equipment that consistently offers the same ease of communication that is expected from a group meeting. "Our focus

has always been on successful meetings," says Gerard Pompa, vice president of Compunetix. "We do this regardless of the equipment you have on your desk or in your conference room."

With this philosophy, Compunetix now builds a line of multipoint control units (MCUs) that can link callers using either telephones, PCs, or videoconferencing systems. For example, the Orchestrator 80/160 can manage calls linking up to 160 users, enriching each conference through a long menu of features including scheduling and reservations.

Agencies such as NASA, the Federal Aviation Administration, the Jet Propulsion Lab and the Department of Justice rely on Compunetix equipment, as do several global phone companies, including Bell Atlantic, BT, MCI, Maritime Tel & Tel, Sprint, Telecom Norway, Telstra (Telecom Australia), and Telecom New Zealand. They use Compunetix equipment for voice conferencing, dataconferencing, and videoconferencing.

The newest member in the Compunetix line is the Virtuoso, an MCU that can be used directly by

end users to manage their conference calls. Unlike the old PBX, the Virtuoso can provide to eight-way voice, data, and video calls. Virtuoso can be used not only for last-minute conference calls but also to schedule calls in advance, including those regularly held and recurring ones, such as Monday morning briefings.

Three Rivers Employment Services (TRES) is a good example of a user of the Virtuoso MCU. Privately funded, this nonprofit corporation provides employment training, placement and retention services to economically, socially and culturally disadvantaged persons. Through its multipoint videoconferencing, TRES has trained more than 400 individuals and put them out in the workplace. ■

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Sales Director: Charlie Partridge

Written by: Elliot M. Gold (elliott@telespan.com)

Designed by: Arch Street Design, Greenwich, CT

Cover Illustration by: Harriet Golden

Editorial Offices: 701 Westchester Avenue, White Plains, NY 10604



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GOOD THING: Martha Stewart goods are helping fuel a turnaround at Kmart

AILING

HIS YEAR, IT'S CHIC D SHOP CHEAP

slowdown has even the rich flocking to discounters

the fashionable suburb of Bloomfield Hills, Mich., shoppers are browsing store aisles. Wearing a tailored navy-blue suit and carrying a tan bag, Dorothy Bagley inspects finer tea towels. Maureen Terice, black dress accented with gold jewelry, is looking for holiday gifts. Are they at Neiman Marcus? Saks Fifth Avenue? No, Kmart. "The economy is getting shaky, and people are saying: 'Why do I have this money for things?'" says Bagley. "These stores have a reverse appeal."

That appeal is shaping up as the leading trend of the 1998 Christmas season. Anxiety about the economy is drawing even more shoppers than usual to the nation's Big Three discounters: Wal-Mart, Kmart, and Target. As in last year, all categories of

retailing were racking up respectable gains. But as stock market jitters started to take their toll during the summer, shoppers shifted gears faster than they rush to a Blue Light Special. By September, sales at discount outlets open at least a year rose a healthy 7.6%, while national department-store sales dropped 3.4% for the period.

YULE SEE. More of the same is expected through the fourth quarter, setting the stage for a stark season of big winners and big losers in retail. Signs of economic slowdown are mounting, and the Conference Board, a business-research organization, reported that its October index of consumer confidence slipped for the fourth month in a row. Industry analysts project discounters will enjoy 7% to 8% sales growth this Christmas, with a 2% rise expected for department

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"This is the beginning of an un-
l time for consumers," says Wendy
ann, president of WSL Strategic
l, a New York consulting firm.
ounters have become a very ac-
le place to shop, regardless of
old income."

h nearly \$200 billion of holiday
ing cash up for grabs, discount
ants have a hard time restrain-
eir glee at the prospects. "We're
on our way to a record year,"
Wal-Mart Stores Inc. Vice-Chair-
Donald G. Soderquist. Even lag-

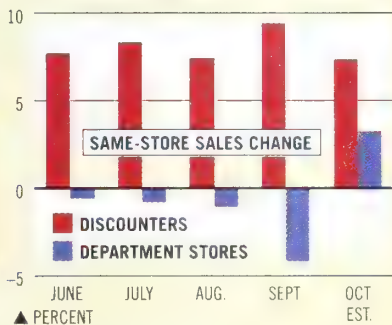
from 25% to 15%, while discounters
have soared from 43% to 63%. And in
the past five years, upper-income house-
holds have doubled their visits to dis-
count stores, according to WSL's con-
sumer research.

Target, the highly profitable discount
chain of Dayton Hudson Corp., has done
the most to draw in upscale customers.
Target has attracted the rich by stock-
ing stylish housewares and clothing and
by promoting itself with humorous, iron-
ic advertising in high-end publications
such as *The New York Times Maga-*

AS OPTIMISM SLIDES...



...DISCOUNTERS REAP GAINS



Kmart, which flirted with bank-
ruptcy just three years ago, sees a
lining in the hovering storm.
"If the economy heads south and
are concerned about their spend-
ing," says Kmart Chairman
Hall, "they will become much
price-conscious."

FEDERATED. Of course, department
stores are hardly ready to concede de-
feated. Federated Department Stores, par-
ticularly such as Macy's and Bloom-
ingdale's, for example, has launched a
revamp of its major stores. Federated
Chairman James Zimmerman calls it an
effort to "return the excitement" to de-
partment-store shopping. In addition to
opening up stores, Federated will em-
ploy its own private-label clothing.
The goal is to give consumers exclusive
merchandise at lower-than-
retailer prices.

the battle will be a
one. The stigma of
shopping at discounters has
disappeared in recent
years. In the past decade,
department stores
have seen their share of the
retail sales market plunge

from 25% to 15%, while discounters
have soared from 43% to 63%. And in
the past five years, upper-income house-
holds have doubled their visits to dis-
count stores, according to WSL's con-
sumer research.

Target's success has spawned imita-
tion from rivals. Part of Kmart's nascent
recovery can be attributed to its Martha
Stewart line of housewares, which gen-
erated \$500 million in sales last year
and is expected to grow to \$1 billion
next year. While only 1.5% of Kmart's
total sales, Hall says the line creates a
"halo" over the entire store, bringing
in more well-heeled shoppers. "Every
day, we hear customers saying: 'I don't
normally shop Kmart, but I love Martha
Stewart,'" he says.

Consumers certainly notice the
change. Allison Kahn of New
York has credit cards from a
slew of department stores.
But she's buying more at dis-
count chains. "I think their
stuff is getting better and the
department-store stuff is get-
ting worse," she says. That's
exactly the reaction H. Lee
Scott Jr., president of Wal-



**New Yorker says discounters' merchandise
getting better, and department stores' worse**



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Marketing

Mart's discount stores unit, is trying to elicit. He points to products, such as 230-thread-count sheets, that impress shoppers who usually shop at department stores. "That customer will look at it and think: 'Wow,'" he says.

But in this fight, fancy department store housewares are only one lure. Discounters are also using groceries to draw more crowds. These days, discounters can pick up a gallon of milk for the same time they buy toys. Wal-Mart emerged to become the nation's second largest grocery retailer, thanks in part to its 500 supercenters, which carry food and general merchandise. Kroger is looking to join with a supermarket chain and is already offering groceries at 5% off its stores.

ONE-STOP SHOPPING. Both chains have concluded that if shoppers come to one store several times a week to buy what they need, that creates opportunities to sell gifts, clothes, and other items they might have bought at a department store. "You can save time and avoid a trip to the mall," says retail consultant Britt Beemer of America's Research Group. "That's a powerful lure for a shopper who can afford to go elsewhere but doesn't feel she has time."

But don't look for Chanel bags at discounters. There's a limit to the reach, and merchants know it. "You're not chasing demographics into the stratosphere," says Douglas A. Sussner, senior vice-president of Target in Dayton, Ohio. To move to the upscale would push the stores' prices higher, he says. Wal-Mart's Scott Cook points out that the chain won't have sweaters—but, he says, "we can price the best \$19 sweater qualitywise."

Of course, an actual recession could hurt even the sellers of low-priced goods. "If total market sales slow, our share gains would likely be hurt," says Scovanner. "We're immune to harsh times." But a little nervousness among consumers is a good thing for discount stores. And with the economy's ill winds blowing customers their way, the Big Three discounters are set to capitalize. "If we do go into an extraordinary recession, I'm going to do very well," says Thorburn Jackson, who holds 17.5 million shares of Kmart stock as portfolio manager of the Prudential Equity Fund. "In all likelihood, these guys are a terrific buy." And that prospect has discount store executives as excited as it has Christmas morning.

By Keith Naughton in Detroit
Wendy Zellner in Dallas

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COMMENTARY

By Stan Crock

CHINA AND THE U.S.: THE SPARKS MAY START FLYING

For most of the past two decades, when China Ocean Shipping Co. docked its cargo vessels at the port of Long Beach, Calif., the giant commercial carrier was considered a model neighbor of the nearby Long Beach Naval Station. Today, the station is closed, and the property is overgrown with weeds. But when COSCO signed a lease for the site in 1996, right-wing law-
 makers scurried to block it. Why? COSCO's customers in Asia loaded its ships to transport automatic weapons to Los Angeles and strategic materials to the Middle East. "It would be foolish for America to surrender control of a West Coast port to an arm of the Chinese military," warns Senator James Inhofe (R-Okla.). At the highest level of executive power, China and the U.S. are enjoying a brief interlude of amiable relations. But watch out: The seeds of the next round of Sino-U.S. conflict are already being sown. One is the COSCO controversy. Another is a wrangle over the rights of U.S. ship operators in China. A third is environmental: U.S. regulators are alarmed at an influx of Chinese beetles to the U.S. But the real problem is China's trade surplus of \$55 billion in at record level. Because of this overwhelming balance in trade—and the deep suspicions of China that are rooted in America's conservative politics—plenty more points of friction will emerge.

Politicians angling for advantage in the upcoming Presidential election will play the China card with a vengeance. Already, in the defense of President Clinton signed on Oct.

17, anti-China rhetoric led Congress to bar COSCO—which denies any military connections—from leasing Long Beach land. The bill also repeals the authority Clinton has to waive the prohibition. Never mind that FBI, Pentagon, and National Security Council reports find no threat.

The GOP's ability to shoot down the COSCO offer may have an unusual

flag ships have here. In a comment filed on Oct. 23, Sea-Land Service Inc. of Charlotte, N.C., gripes that "the situation is getting worse rather than better." Not surprisingly, while certain Republicans were flogging the COSCO issue, the Chinese started creating difficulties for Sea-Land's plans to operate a terminal in Tianjin.

If the FMC thinks Sea-Land is being mistreated, it could turn up the heat. Last year, after finding that Tokyo's bureaucracy hurt U.S. operators, the FMC came within a whisker of imposing fines large enough to impair the U.S.-bound trade of Japanese carriers. Says an Administration official: "If these issues are not tended to properly, they have the potential to mushroom."

FRICTION. Meanwhile, the U.S. Agriculture Dept. on Sept. 18 proposed a ban on wooden packing material from China unless it is treated to eradicate Asian longhorned beetles, which have steadily destroyed trees from New York to California. The bugs come in crates from China: Potential damage from an infestation could be \$41 billion. The ban, slated to take effect on Dec. 17, could affect as much as 50% of Chinese exports to America, China says. The Chinese say they cannot possibly comply.

There's plenty to put trade friction on the front pages. Already, other U.S. companies are angry about protectionist measures China is adopting in areas such as telecom gear. As these quarrels multiply, watch for the China-bashing to get a lot worse.

Crock covers foreign affairs from BUSINESS WEEK's Washington bureau.



LONG BEACH: *The Chinese are outraged that COSCO was barred*

DANGER POINTS IN CHINA-U.S. TRADE

THE COSCO AFFAIR U.S. right-wing politicians oppose a move by the Chinese fleet operator to lease facilities in Long Beach.

MARITIME MAYHEM U.S. regulators are steamed about China's foot-dragging in opening up port facilities to U.S. carriers.

BEETLE FRENZY A beetle shipped in from China is munching up U.S. forests. Environmentalists want the Chinese to take action.

DATA BUSINESS WEEK

ricochet effect. Shipping-industry sources fear the COSCO flap could provoke a Chinese attempt to scuttle a new maritime treaty aimed at giving U.S. carriers greater access to China's ports. The Chinese confirm that, yup, they're angry. "This Long Beach event, of course, will affect the negotiations," says a Communications Ministry official in Beijing. "The Americans have treated us unfairly."

Tension was already rising between U.S. and Chinese carriers. The U.S. Federal Maritime Commission is investigating whether China reciprocates the open access Chinese

EDITED BY AMY DUNKIN

BARGAIN TIME FOR CONVERTIBLE BONDS

If the recent stock slide made you want to run for cover, but low bond yields left you uninspired, perhaps you should consider convertible securities. Bonds or preferred shares that can be turned into common stock, convertibles allow investors to profit when stocks rise but offer the protection of fat yields when equities fall. Attractive in a volatile market, they are even more so

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at today's prices. "There are some extremely good buys out there," says Nick Calamos, director of research at Calamos Asset Management, whose convertible funds are among the year's best performers (table).

A company's convertibles tend to rise along with its common stock price—typically two-thirds as much, according to Merrill Lynch. But when stocks sag, the average convertible suffers only half the damage. That risk-reward profile may reassure nervous investors intrigued by the nascent rally in small-company stocks. With two-thirds of all convertibles issued by small and midsize companies, these hybrids offer exposure to the volatile market at a fraction of the risk.

HEDGE HASSLE. A word of warning, though: Convertibles don't always deliver as much protection as expected. In August, if the normal pattern had prevailed, convertibles would have lost half the 19.3% forfeited by their parent companies' stocks. Instead, Merrill estimates they tumbled 11.5%. Already punished when investors unloaded the stocks to

which they are tethered, convertibles fell even more when cash-strapped hedge funds sold them indiscriminately, notes Sandra Durn, manager of the Nicholas-Applegate Convertible fund. As a result, Merrill calculates that convertibles now trade at 4% below their fair value, more than twice the normal discount.

Ordinarily, it is hard to discern bargains in the complex convertible market. But with prices low and yields higher than usual, some instances of mispricing have become easier to spot. For example, some convertibles are yielding more than comparable regular bonds, the opposite of what's typically true. As a result, investors are getting the convertible's extra feature—its option to be exchanged for stock—for free.

Consider Thermo Electron, a \$3.6 billion maker of recycling and biomedical products, which starts companies around the technologies it develops. Its convertible yields 7.8%, while its straight bond returns 7.66%. Another with cheap convertibles is HealthSouth, a network of outpatient surgery and rehabilitation cen-

ters. Its convertible and bond both yield about 8%, Calamos says. Both convertibles are sold over the counter in \$1,000 denominations.

The companies' stocks and convertibles were hit hard for reasons separate from global credit jitters.

Thermo Electron fell short of earnings expectations, and HMOs are pressuring HealthSouth to cut costs. But Calamos maintains that both convertibles were punished excessively: "With pressure on hedge funds to sell, convertibles are being pushed down in price by 3%, 5%, even 10% more than where they would be."

Still, neophytes should be careful about buying based on a simple yield comparison.

When a convertible is in dire straits, its stock sometimes returns more than its bonds because convertible holders are at greater risk of getting paid in a bankruptcy, says M. First Vice-President Anne Cox. Convertibles also could be threatened by concerns about recession or emerging markets resurfacing.

Given the \$120 billion convertible market's complexities, experts advise individuals to approach through one of 27 independent end and nine close convertible funds. They have the resources to construct diversified portfolios.

Top-Performing Convertible Funds

FUND	TOTAL RETURN		ASSETS MILLIONS	EXPENSE RATIO
	3-YEAR*	YEAR TO DATE		
CALAMOS GROWTH & INCOME	17.27%	3.37%	\$ 17.0	2.00%
NICHOLAS-APPLEGATE CONVERTIBLE I	15.28	1.36	250.0	1.35
DAVIS CONVERTIBLE SECURITIES	15.18	-8.90	269.9	1.08
NORTHERN INCOME EQUITY	13.96	-1.62	107.2	1.00
CALAMOS CONVERTIBLE	13.75	0.36	117.0	1.40

*Annualized average as of Sept. 30

DATA: MORNINGSTAR INC.





price swings. By contrast, those with low premiums tend to more closely track their corresponding shares.

Which makes sense depends on how conservative you want to be. If income is a priority, funds with high premiums carry the best yields.

If you want to go it alone, how can you pick a good convertible bond?

Find a company whose

store chain's \$39 stock price by the 27,672 shares its convertible can be redeemed for. The result, the convertible's value today, is \$1,079. The difference between that sum and the convertible's actual price of \$1,260 is the "conversion premium" of \$181, or 17%.

To figure out how long it will take to recoup the extra \$181 the convertible costs, divide the 17% premium by the 4.15-point difference between the convertible's 5.25% yield and the stock's 1.1% yield. In Rite Aid's case, the investor breaks even after four years.

But because the chain can call the bond or force a conversion in two years, an investor will lose money unless the convertible rises by more than \$181 first.

SAFE BET? Nicholas-Aplegate's Durn believes Rite Aid's stock will rise enough to make the convertible a safe bet. But her analysis defies a do-it-yourself approach. Before buying, she plugs prospects into a model that weighs interest-rate spreads, stock price volatility, and the company's credit profile, among other factors. Her goal: to find convertibles like Rite Aid's that are likely to participate in 60% to 80% of a stock's rise, but 50% or less of its fall.

To get data for a breakeven analysis, you can find convertible bond quotes in newspapers, on the Web (one source is www.convertbond.com), or in Value Line's Convertibles Survey, available at public libraries. For help crunching the numbers, try a Web calculator. You can find a good one at www.numa.com/derivs/ref/calculat/cb/calc-cba.htm. If your goal is to remain exposed to stocks, but you're afraid of the market's gyrations, convertibles may be an acceptable middle ground. At today's bargain prices, they're an especially appealing alternative.

Anne Tergesen

A warning: The securities don't always deliver the expected protection. Just look at last August's slide

and www.personalwealth.com.

One way to size up how much protection a fund is likely to offer is to look at its average premium. Because convertibles pay higher dividends than common stock, investors must pay a premium over the price of the common to purchase them. Convertibles with higher premiums than today's 39% average are better insulated from stock

prospects you like. "The primary driver of convertible performance is the underlying stock," says Charles Pohl, senior portfolio manager of the Putnam Convertible Income-Growth Trust. Then comes the old standby, the breakeven analysis.

Consider Rite Aid's 5.25% convertible bond, maturing in 2002. To calculate its premium, multiply the drug-

the bonds, which usually trade in large blocks in the over-the-counter market.

Selecting a convertible you should consider more than fees and performance.

It's important to know what a manager invests in securities, says Jon Krasinski, analyst for Morningstar. Stocks were soaring, and top convertible funds upped returns by putting as much as 25% of their assets in stocks. There's nothing wrong with that unless you're more defensive investor. You can check out a fund's common stock holdings at several independent Web sites, including [bbsmarketwatch.com](http://www.bbsmarketwatch.com)

GOOD THINGS HAPPEN TO THOSE WHO WAIT

Anyone looking for encouragement to wade back into the stock market got

some recently when Southeastern Asset Management reopened Longleaf Partners Fund. One of the premier vehicles for patient, value-oriented investors, the \$3 billion fund closed its doors to newcomers way back in September, 1995, when Memphis-based managers O. Mason Hawkins and G. Staley Cates couldn't find enough inexpensive stocks to buy.

That frustrating situation dragged on, even into last June, when as much as 15% of the fund sat idling in cash. Now, with the broad stock market still off sharply from its July peak, it's a new world for these investment cheapskates. Hawkins and Cates, two of the most publicity-shy money managers around, aren't talking. But Southeastern Executive Vice-President Lee Harper reports that by the end of October, Longleaf had just 1.5% of its assets in cash, "and that's

spoken for. It's just sitting on the trading desk waiting to get invested."

Longleaf is not climbing out on this limb alone: Third Avenue Value Fund, run by dean of value investors Martin Whitman, reopened on Oct. 15 as it, too, is finding fresh investment opportunities. But through October, the fund is down 4.1% for the year.

With a total of \$10 billion under



HAWKINS

Longleaf, the value fund, has reopened.

But prospective investors should be prepared to be in for the long haul

management, Southeastern is extending its bets with a new foreign-stock fund, Longleaf Partners International, which opened on Oct. 26. Its manager, J.P. Morgan veteran Andrew McDermott, is based in Tokyo and has invested all but 5% of the fund's initial \$25 million. He has 34% in Canada and 27% in Japan,

with the balance scattered around the globe. Unlike many international-stock funds, Longleaf intends to hedge the fund's foreign-currency risk.

Back in Memphis at the flagship fund, Longleaf was up 4.7% through Oct. 31, vs. a 1.1% gain for its mid-cap stock benchmark, the Standard & Poor's MidCap

400 Index. The fund typically holds big positions for four or five years in just 20 to 30 stocks. The strategy, says Harper, "is to buy good businesses run by good people at significantly discounted prices." Hawkins and Cates find those stocks first by figuring what the company un-

quarter has also added a handful of names. Among them: United Therapeutics, Hilton Hotels, Canadian Pacific, each of the fund's top 10 positions.

Longleaf is also seen among "the industry's most aggressive" funds, having been the most up—oil and gas stocks

cial, and lodging, says F. "We have

seen an environment like this since 1990," when the last slipped into recession. Longleaf's price-to-earnings ratio—the amount of the fund has paid for stocks divided by Harper and Cates' estimate of the stocks' total intrinsic value—is at 50%. That's as low as it has ever been, Harper says.

But when will that intrinsic value be realized? Southeastern cautions prospective investors they should be prepared to wait at least five years. One other warning: Longleaf plans to maintain a higher-than-average

capital gains contribution on new investments. Investors should wait for the shares for their accounts until that date.

Since Longleaf Partners' inception in 1987, the fund has boasted a viable record.

\$10,000 initial investment. Longleaf was worth \$100,000 at the end of September, compared with \$55,600 in the Standard & Poor's 500-stock index. \$41,776 for the average cap fund that invests in growth and value stocks, according to Morningstar. Over the past five years, the outperformance came with 17% less than average risk. Will Longleaf Partners be able to maintain that happy balance? Morningstar analyst Bruce Co: "If my mom called and said, 'Great-Aunt died, and I've got a lot of extra money,' I'd point this direction." Robert



CATES

derlying a stock is worth to a private buyer based on its cash flow and liquidation value. Then they check how the stock market is valuing the business.

LONELY CHOICES. If the market values the business at 60% or so less than what their pencil work tells them it's worth, they get interested. And, of course, the cheaper the better, a preference that led them into such lonely spots as Japanese financial stocks and News Corp., Rupert Murdoch's global media company, when few saw its potential.

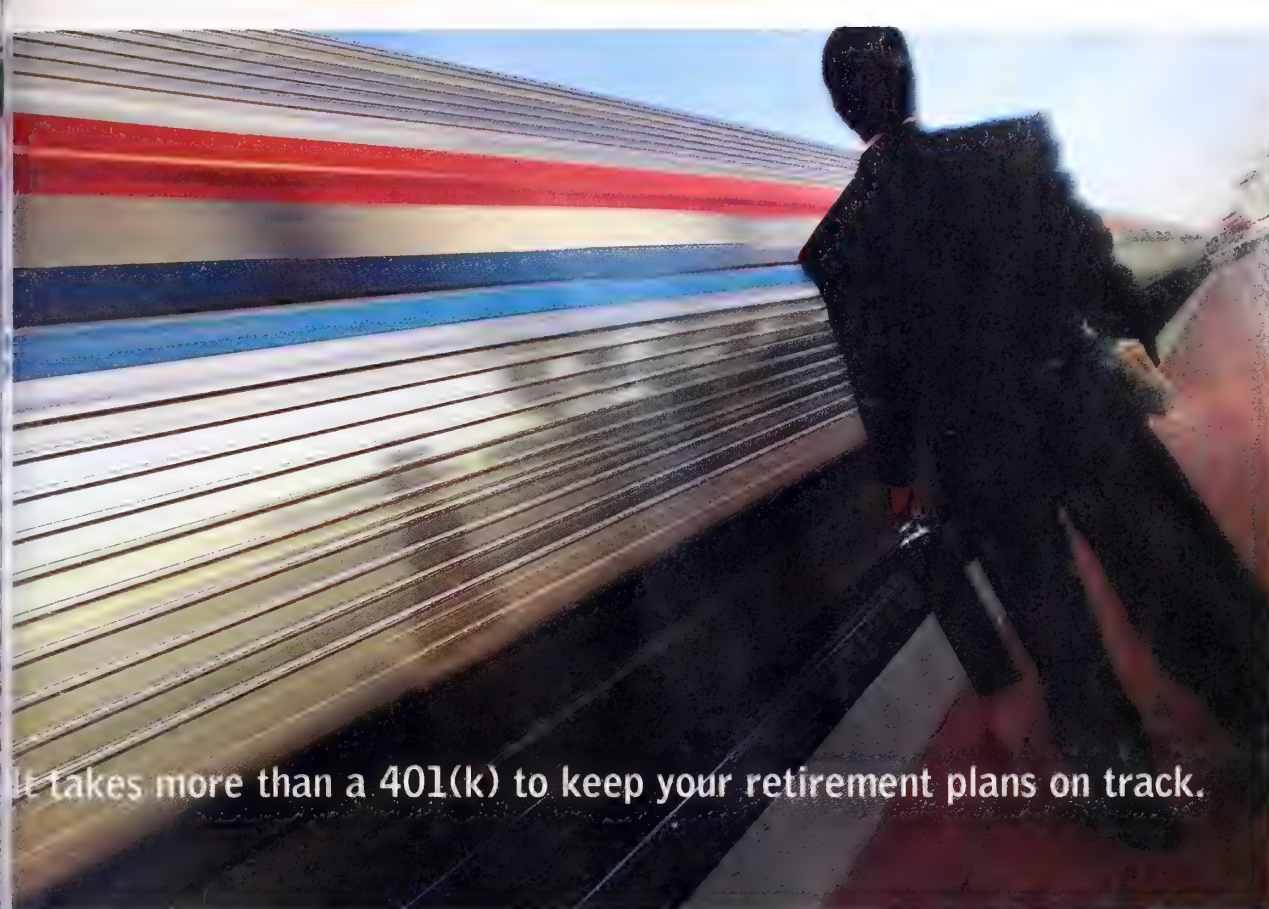
Since midsummer, Hawkins and Cates have been adding to stakes in some earlier acquisitions, such as package shipper FDx, which now makes up nearly 10% of the fund. Longleaf in the last

Inside Longleaf Partners Fund

RECENT BUYS (SYMBOL)	PRICE*	52-WEEK LOW/HIGH
CANADIAN PACIFIC (CP)	\$22.75	\$17.94 / \$31.56
HILTON HOTELS (HLT)	20.06	12.50 / 35.50
UNITED HEALTHCARE (UNH)	42.94	29.56 / 73.94
RECENT SALES (SYMBOL)	PRICE*	52-WEEK LOW/HIGH
KNIGHT-RIDDER (KRI)**	\$51.06	\$40.50 / 59.62
MEDIA ONE GROUP (UMG)**	42.19	22.69 / 50.12
RALSTON-PURINA ROUP (RAL)	33.31	26.00 / 39.06

*Nov. 2 **Reduced position

DATA: SOUTHEASTERN ASSET MANAGEMENT, YAHOO! FINANCE



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G-9249A (8/98)



A WAY TO 'TAKE THE WAR OUT' OF DIVORCE

Divorcing after 29 years of marriage, Steve Lowenstein and his wife, Inge, were starting to spend "into the stratosphere" on combative lawyers. Battle-weary, they agreed to try mediation at the urging of their grown son. In a dozen two-hour sessions with mediator Michael Marks of New York, they found creative ways to carve up assets that included the family chemical business, homes in New Rochelle,

N. Y., and Boca Raton, Fla., and sizable investment holdings. "Mediation was more expedient, more effective, and more cost-effective," says Steve.

Divorce mediation, in which a couple divides assets, liabilities, and parenting responsibilities with the aid of a neutral third party, was rare 20 years ago. But today, couples are increasingly pursuing mediation as an alternative to costly, bitter court battles. It typically takes 4 to 8 sessions, or 6 to 24 hours, to reach an agree-

ment, at \$100 to \$300 an hour—cutting the cost of a divorce by half, studies show. Settlements occur in 90% of private mediations and 60% of mediations mandated by courts, usually in custody cases. In most studies, 70% to 90% of couples say they're satisfied with the outcome. "Mediation takes the war out," says John Haynes, president of the Academy of Family Mediators (table).

Surprisingly, "even people who have lost in some sense feel better about the results because they have more input," says Jessica Pearson, director of the Center for Policy Research in Denver. Mediation also leads to fathers complying more with child-support orders and re-

maining involved in kids' lives, according to a 1998 study by psychologist Robert Emery of the University of Virginia. Because post-divorce arrangements are personalized, couples have room to be creative than in court-ordered arrangements. For example, courts often split holidays between parents. But in mediation, a parent who is sentimental about Christmas may trade it for spring vacation with the child.

NOT FOR EVERYONE. Mediation works best for couples who are distanced emotionally from each other and are committed to their children's best interests. It is not recommended for dissatisfied marriages troubled by violence, alcoholism, or mental impairment. And without courts' discovery procedures, mediation doesn't work if either party is intent on hiding assets.

In choosing a mediator, check for membership in the Academy of Family Mediators. Ask how many divorces each mediator has handled over what period. Ask about background. Whether a mediator is a therapist, lawyer, or former judge, matter but each brings

or her own professionalizing and style to the table.

Early on, you'll bring financial statements and get projections. If finances are complex, you might consult an accountant or financial planner. With the mediator's aid, you and spouse brainstorm, make options, and hammer out solutions. The mediator v-

YOUR LIFE

FAMILY

How Divorce Mediation Works

A couple can choose a mediator through referrals or by contacting the Academy of Family Mediators (781 674-2663; www.mediators.org)

- The wife and husband meet with a mediator in four to eight sessions lasting one to two hours each.
- They work their way from the easiest to most difficult issues, from dividing property to child custody.
- Spouses may also use accountants, financial planners, or child-development experts as advisers.
- Once the mediator draws up an agreement, the two sides take it to their lawyers for a final check.
- After a brief hearing, a judge approves the agreement and the divorce is granted.



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rect you to work from easier disputes to the toughest.

Not that mediation is a fight-free zone: Mediators must be skilled at calming turbulent emotions. If tempers get hot, a husband and wife may have to retreat to separate rooms as the mediator shuttles between them. Yet most often, couples learn to talk through their differences. "People say if they could have used these problem-solving techniques in their marriage, they wouldn't be seeing a divorce mediator now," says Arlington (Va.) mediator Peter Maida.

FINE-TUNING. Once you reach an agreement, you and your soon-to-be-ex take the papers to your own lawyers. If your lawyer has objections, you may return to the negotiating table to fine-tune. In most states, a notarized agreement or brief appearance before a judge is all that's required to finish the divorce.

Although about half of the 3,568 members of the Academy of Family Mediators are lawyers, many attorneys remain hostile to mediation. "If you have one manipulative, controlling person more knowledgeable than the other, you won't have a fair mediation," says Lynne Gold-Bikin, past chair of the American Bar Assn.'s family-law unit.

Against the advice of family and friends, Judy Mierop of Danville, Pa., chose mediation 13 years ago for her divorce. "I've never regretted it," she says, citing the "cordial and respectful" relationship she now has with her ex.

Recently, she tried without success to persuade friends who were divorcing bitterly after 42 years to try mediation. "They were arguing over crazy little things and had their lawyers writing letters back and forth at \$500 a pop, when they could have sat down and ironed it out in a few sessions," she says. Add mediation's savings to the psyche, and you've got a deal.

Meg Lundstrom

THIS CADDY HAS GLOBAL CACHET

Cadillac's updated Seville luxury sedan has arrived on the U.S. market with a

tough assignment: Retain traditional Cadillac customers while wooing import-lovers out of their Lexuses and BMWs. Around the world, Gen-

eral Motors is making Cadillac one of its major brands and hopes 20% of all Sevilles will be sold in Europe, Japan, and other markets. For the most part, the Seville does a graceful job of this awkward straddle, blending American styling, Japanese smoothness, and powerful European performance into a cohesive package.

The new Seville's styling is little changed from its predecessor. In fact, as other cars have gained more sharply defined edges and creas-

pension tauter. To please urban drivers facing tight parking spaces, Cadillac shrank the car by four inches.

Inside, Seville borrows the optional wood-trimmed steering wheel from Jaguar, the cabin mimics the hush of a Lexus, and the console and

YOUR LIFE
AUTOS

dashboard controls copy the uncluttered feel of a German sedan. There's scads of storage space, and the instrument panel gauges seem to float in a slick, 3-D display. Cadillac has stripped much of the chrome beloved by

But it outperforms in and responsiveness. S Northstar V-8 engine transmission deliver horses with superb sness. The SLS version, delivers 275 HP and fancy standard fea starts at \$44,025.

The \$50,000 Seville drove had its shortco When I opened the tr the rain, water dripp Also, the air conditioning irritatingly long to cool fling interior. But in it nology, the STS shines the Cadillac, Continental Lexus' LS400 are crammed with gizmo Seville does the best integrating them. Th coin, loaded with dia switches, seems busy a \$59,600 navigation-s equipped LS400 make change radio and tel



CADILLAC SEVILLE STS

Base Price:
\$48,520

The model is crammed with gizmos, but the technology seems to work invisibly

es, the Seville looks softer and more subdued. At a distance, my mother mistook it for a Ford Taurus. So, it remains distinctively American in its looks, with bold, crisp lines and a spoiler-like arch to the back end. But GM has adopted some touches from Japanese and European rivals. Cadillac beefed up the ride and handling by making the chassis more rigid, the wheelbase wider, and the sus-

Gramps, but the remaining trim may still be too much.

To performance purists, the front-wheel-drive Seville is no match for the rear-wheel-drive Mercedes E-Class and BMW 5-series. But in the real world, Cadillac's main rival is Lincoln. At a base sticker of \$48,520, the Seville STS is pricier than Lincoln's \$38,995 Continental.

ture settings awkward screen display

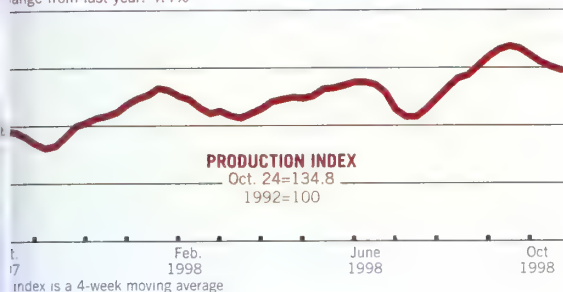
Seville's m pealing techn nearly invis comf seat based on l beds that com adjust p points for bu tims. And th biliTrak chas

tem prevents fishtail slippery roads. The be Seville's tech is you r even know it's worki mately, that's what want in a luxury perf sedan. Kathleen

Business Week Index

PRODUCTION INDEX

Change from last week: -0.2%
Change from last year: 4.4%



The production index continued to fall in the week ended Oct. 24. The index showed a spark of life by increasing 0.1% to 134.7, from a week ago. After seasonal adjustment, steel output fell 2.3%, as the index continues to be blasted with imports and alleged dumped steel from Asia. Electric power output and rail-freight traffic were also down. Auto, oil, coal, and lumber production posted small increases.

Production index copyright 1998 by The McGraw-Hill Companies

PRICING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (10/30) S&P 500	1098.67	1070.67	20.1
RATE BOND YIELD, Aaa (10/30)	6.47%	6.52%	-5.8
SUPPLY, M2 (10/19) billions	\$4,345.0	\$4,318.3r	8.8
CLAIMS, UNEMPLOYMENT (10/23) thous.	301	319r	0.0
MORTGAGE APPLICATIONS, PURCHASE (10/30)	249.3	299.6	6.6
MORTGAGE APPLICATIONS, REFINANCE (10/30)	2,495.7	2,774.3	146.3

S: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

INTEREST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
BANK FUNDS (11/3)	5.04%	5.00%	5.54%
COMMERCIAL PAPER (11/3) 3-month	5.05	4.96	5.57
CERTIFICATES OF DEPOSIT (11/4) 3-month	5.29	5.16	5.69
MORTGAGE (10/30) 30-year	6.96	6.99	7.36
TABLE MORTGAGE (10/30) one-year	5.58	5.68	5.63
LIBOR (10/30)	8.00	8.00	8.50

S: Federal Reserve, HSH Associates, Bloomberg Financial Markets

Data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense. nt. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

ACTIVITY & COSTS

Nov. 10, 10 a.m. EST ▶ Output per worker in the nonfarm sector probably rose at an annual rate of about 2% in the quarter after showing no gain in the quarter. That's suggested by the modestly strong rise in economic output in the quarter. But even as productivity rose last summer, wages and costs were advancing at a stronger pace. As a result, unit labor costs in the third quarter likely grew at a 2% pace, on top of the surge in the second.

SALES

Nov. 13, 8:30 a.m. EST ▶ Retail sales probably increased 0.3% in October,

the same modest advance posted in September, says the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Excluding vehicle purchases, store sales likely increased 0.2% in October after edging up 0.1% in September.

PRODUCER PRICE INDEX

Friday, Nov. 13, 8:30 a.m. EST ▶ Producer prices for finished goods probably rose just 0.1% in October, says the S&P MMS forecast. Excluding the volatile food and energy sectors, core prices were likely unchanged. In September, producer prices rose 0.3%, while the core index rose a surprisingly strong 0.4%. But a jump in car prices

caused much of the gain, and that surge is expected to reverse itself in October.

CONSUMER SENTIMENT

Friday, Nov. 13, 10 a.m. EST ▶ The University of Michigan's preliminary index of consumer sentiment for November will probably show a reading of 98, says the S&P MMS forecast. That would be only a bit better than the 97.4 level at the end of October, but below the 98.9 reported in mid-October. Much like the Conference Board's Consumer Confidence Index, the Michigan sentiment index shows that consumers are still upbeat about the current state of the economy, but they are growing warier about the future.

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (10/31) thous. of net tons	1,920	1,986#	-10.9
AUTOS (10/31) units	131,476	136,629r#	2.6
TRUCKS (10/31) units	135,798	151,005r#	-8.2
ELECTRIC POWER (10/31) millions of kilowatt-hrs.	61,192	60,858#	0.4
CRUDE-OIL REFINING (10/31) thous. of bbl./day	14,456	13,712#	-1.9
COAL (10/24) thous. of net tons	22,088#	21,485	6.1
LUMBER (10/24) millions of ft.	498.8#	497.5	11.6
RAIL FREIGHT (10/24) billions of ton-miles	28.3#	28.2	4.4

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WPAI, SFP2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (11/4) \$/troy oz.	289.400	293.150	-7.7
STEEL SCRAP (11/3) #1 heavy, \$/ton	85.50	85.50	-38.7
COPPER (10/30) ¢/lb.	74.9	76.7	-20.1
ALUMINUM (10/30) ¢/lb.	61.8	63.5	-18.7
COTTON (10/30) strict low middling 1-1/16 in., ¢/lb.	65.64	66.09	-5.6
OIL (11/3) \$/bbl.	13.91	13.89	-32.5
CRB FOODSTUFFS (11/3) 1967=100	217.65	221.89	-13.4
CRB RAW INDUSTRIALS (11/3) 1967=100	274.44	273.98	-17.3

Sources: London Wednesday final setting, Chicago market Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (11/4)	116.40	117.53	123.22
GERMAN MARK (11/4)	1.67	1.65	1.72
BRITISH POUND (11/4)	1.66	1.68	1.68
FRENCH FRANC (11/4)	5.59	5.55	5.77
ITALIAN LIRA (11/4)	1649.5	1636.6	1686.5
CANADIAN DOLLAR (11/4)	1.52	1.54	1.40
MEXICAN PESO (11/4)	9.950	10.145	8.200
TRADE-WEIGHTED DOLLAR INDEX (11/4)	106.1	106.4	105.6

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

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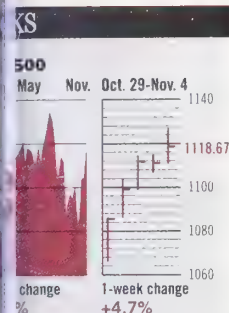
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Investment Figures of the Week



STOCKS
around the globe con-
their climb. Spurred by
han-expected third-quar-
numbers, the Dow Jones
als tacked on a nifty
ints, or 4.9%, for the
oreign markets did even
The Bloomberg index of
largest-cap companies
pe spurred 6.2%. A third
gain came on Nov. 4,
ntly in response to the
rats strong showing in
ction. The real stars for
ek were the emerging
s. Brazil's Bovespa rock-
2.1%, while the Mexican
umped 11.0%.

U.S. MARKETS	Latest	% change Week	% change Year
Dow Jones Industrials	8783.1	4.9	14.2
NASDAQ Combined Composite	1823.6	5.0	11.4
S&P MidCap 400	347.0	7.1	6.1
S&P SmallCap 600	165.1	6.1	-10.6
S&P SuperComposite 1500	236.3	5.0	16.1

SECTORS	Latest	% change Week	% change Year
Bloomberg Information Age	383.2	3.7	32.3
S&P Financials	122.3	6.9	8.0
S&P Utilities	254.7	2.1	22.8
PSE Technology	368.3	6.5	16.0

FOREIGN MARKETS	Latest	% change Week	% change Year
London (FT-SE 100)	5622.9	6.2	14.6
Frankfurt (DAX)	4841.7	6.7	25.2
Tokyo (NIKKEI 225)	14,527.8	7.5	-11.7
Hong Kong (Hang Seng)	10,508.3	5.9	-1.6
Toronto (TSE 300)	6365.8	5.5	-8.8
Mexico City (IPC)	4267.7	11.0	-11.5

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.42 %	1.48 %	1.62 %
S&P 500 P/E Ratio (Last 12 mos.)	28.3	26.6	23.4
S&P 500 P/E Ratio (Next 12 mos.)*	21.8	21.1	18.6
First Call Earnings Revision*	-2.28 %	-5.86 %	-1.63 %

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1076.0	1072.6	Positive
Stocks above 200-day average	30.0 %	24.0 %	Positive
Options: Put/call ratio	0.54	0.55	Negative
Insiders: Vickers Sell/buy ratio	0.46	0.41	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

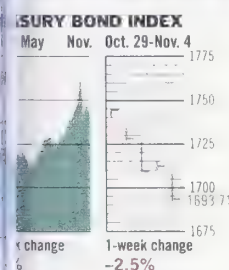
BEST-PERFORMING GROUPS	Last month %	Last 12 months %
Machine Tools	46.8	Genl. Merchandise Chains 64.2
Invest. Banking/Bkrgr.	36.2	Communications Equip. 53.2
Toys	35.9	Drug Chains 52.0
Instrumentation	28.3	Specialty Appar. Retailers 51.4
Communications Equip.	27.8	Drugs 49.9

WORST-PERFORMING GROUPS	Last month %	Last 12 months %
Gold Mining	-5.2	Oil & Gas Drilling -57.4
Electric Companies	-4.1	Oil-Well Equip. & Svcs. -37.8
Domestic Oil	-1.9	Metals -35.5
Pollution Control	-1.8	Leisure Time -35.5
International Oil	-1.4	Oil Exploration & Prod. -27.2

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Exxon	73	-1 7/8
Royal Dutch Petroleum	49 3/16	-1/16
SBC Communications	47 15/16	-5/16
Cardinal Health	64 1/8	-1 39/64
Lockheed Martin	109 1/16	-7/16
Chevron	80 3/4	-8 3/16
Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Cisco Systems	63 3/8	15 1/16
Dell Computer	64 3/8	6 11/16
MCI WorldCom	55 7/16	10 13/16
PeopleSoft	22 1/2	1 13/16
Washington Mutual	36 5/16	6 11/16
Ciena	18 1/4	6 15/16

REST RATES



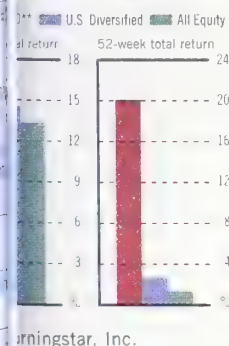
KEY RATES	Latest	Week ago	Year ago
MONEY MARKET FUNDS	4.89	4.89	5.14
90-DAY TREASURY BILLS	4.55	4.28	5.25
6-MONTH BANK CDS	4.45	4.47	5.18
1-YEAR TREASURY BILLS	4.47	4.07	5.40
10-YEAR TREASURY NOTES	4.88	4.60	5.92
30-YEAR TREASURY BONDS	5.33	5.13	6.23
LONG-TERM AA INDUSTRIALS	6.45	6.28	6.78
LONG-TERM BBB INDUSTRIALS	7.32	7.21	7.18
LONG-TERM AA TELEPHONES	6.79	6.63	7.08

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	Last week	30-yr. bond Latest week	Last week
GENERAL OBLIGATIONS	4.15%	4.09%	4.85%	4.79%
PERCENT OF TREASURIES	84.98	89.75	91.08	93.55
TAXABLE EQUIVALENT	6.01	5.93	7.03	6.94
INSURED REVENUE BONDS	4.26	4.20	5.08	5.02
PERCENT OF TREASURIES	87.23	92.16	95.40	98.04
TAXABLE EQUIVALENT	6.17	6.09	7.36	7.28

MUTUAL FUNDS



EQUITY FUNDS

Leaders	Laggards
Four-week total return %	Four-week total return %
Frontier Equity 42.8	ProFunds UltraShort OTC Inv. -32.3
Newport Tiger T 40.5	Prudent Bear -27.0
Montgomery Emerg. Asia R 38.8	ProFunds UltraBear Inv. -22.0
Firsthand Tech. Leaders 38.3	Comstock Part. Cap. Val. B -18.5
ProFunds UltraOTC investor 37.8	Potomac OTC/Short -16.6
Leaders	Laggards
52-week total return %	52-week total return %
Smith Barney Telecomm. Inc. 51.5	Lexington Troika Russia -85.8
Flag Investors Commun. A 46.6	Eaton Vance Wwde. Dv. Res. B -54.8
Transamerica Aggr. Gr. Inv. 43.4	Dreyfus Aggressive Growth -54.3
Janus Twenty 37.7	Frontier Equity -50.9
Sequoia 36.7	American Heritage -49.5

EQUITY FUND CATEGORIES

Leaders	Laggards
Four-week total return %	Four-week total return %
Pacific/Asia ex-Japan 25.3	Precious Metals -6.7
Technology 24.0	Utilities 2.9
Small-cap Growth 19.7	International Hybrid 4.5
Diversified Pacific/Asia 19.5	Real Estate 5.6
Communications 19.3	Domestic Hybrid 6.3
Leaders	Laggards
52-week total return %	52-week total return %
Utilities 21.7	Latin America -33.8
Communications 19.8	Diversified Emerging Mkts. -31.5
Large-cap Growth 15.2	Natural Resources -26.9
Large-cap Blend 12.9	Pacific/Asia ex-Japan -25.8
Europe 10.7	Precious Metals -25.1

as of market close Wednesday, Nov. 4, 1998, unless otherwise indicated. Industry S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Nov. 3. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

VICTORY OF THE SENSIBLE CENTER

Colin Powell calls it the "sensible center," and it triumphed across the country in the elections. The pols and pundits who were so surprised by the outcome can try to spin it any which way, but the bottom line is that moderate Republicans and Democrats carried the day. Voters favored pragmatism over extremism, compassion over anger, and bread-and-butter issues over divisive religious or ideological crusades. Policies that voters believed promoted economic growth and security were rewarded, and partisan attacks against individuals were not. This is as it should be. In this unusual election, the people chose wisely.

Let's go to the tape. The voters put on an amazing display of ticket splitting. Time and again they went out of their way to choose moderates, regardless of party affiliation. In Florida, Republican Jeb Bush won as governor, while voters gave Democrat Bob Graham the Senate seat. In Wisconsin, Democrat Russ Feingold won as senator, yet voters gave incumbent Republican Governor Tommy Thompson another term in office. In New York, people gave Republican Governor George Pataki 55% of the vote and turned around to give Democrat Charles Schumer 54%.

Whether it was Alfonse D'Amato in New York or Dan Lungren in California, politicians associated with partisanship or hot-button social issues lost to moderates who spoke with quieter, more compassionate voices. Most of the winning Democrats ran also as moderates, not as liberals.

The Bush brothers epitomize this new centrist, compassionate paradigm for the Republican Party. Their victory in Texas and Florida present a striking alternative to the partisan style of the House Republican leadership. Newt Gingrich. In addition, the "any government is better than no government" attitude of congressional GOP firebrands is accepted by Republican governors. Those who were re-elected actively used the tax code, local colleges, and government development agencies to foster growth and generate jobs.

Impeachment ads may have helped get Republican voters out, but a backlash against Independent Counsel Kenneth W. Starr more than neutralized them. Indeed, they have driven independents and Reagan Democrats to the Democratic this time around. With unemployment low and economic growth comes rising, the electorate preferred to view President Clinton in terms of public policy rather than personal morality. Education, health care, and Social Security clearly took the lead over abortion, impeachment, and even tax cuts as issues of public traction. The electorate, feeling flush, approved a record billion in new school and infrastructure bonds.

Voters have been sending the message of moderation to politicians for years. If they must, voters will choose a moderate government to offset extremism and maintain balance. If they can, they vote for moderates regardless of party affiliation. Judging by the congressional leadership of both parties, the message is still not getting through. It's time they listened.

FROM PANIC TO EUPHORIA

The bulls are running again on Wall Street. Euphoria redux. The Dow flirts with 9000, IPOs are back, and mergers are hot once more. The global financial crisis fades into yesterday's bad dream. Investors crow, "We dodged the bullet." Happy days are here again. Or are they?

There is plenty of information to show that the soaring equity market is swinging away from fundamental realities. The truth is that enormous uncertainties in the global economy remain unresolved. The calm that appears to have settled over the credit markets may actually turn out to be the eye of yet another storm. No one knows.

What is known is that a deflationary recession still grips 40% of the world's economy. The depression-like fall of gross domestic product in Korea and Thailand has bottomed out, but neither country has recovered. Brazil is set to plunge into recession. Japan remains in recession, and its bank reforms may or may not be implemented. China's regional investment trusts are going bankrupt, with billions in hidden foreign debt they may default on. Russia, now run by an ex-KGB general, is heading down the path of hyperinflation.

Nor is the U.S. as immune as the markets seem to be saying. Take a look at corporate profits. A serious disconnect has

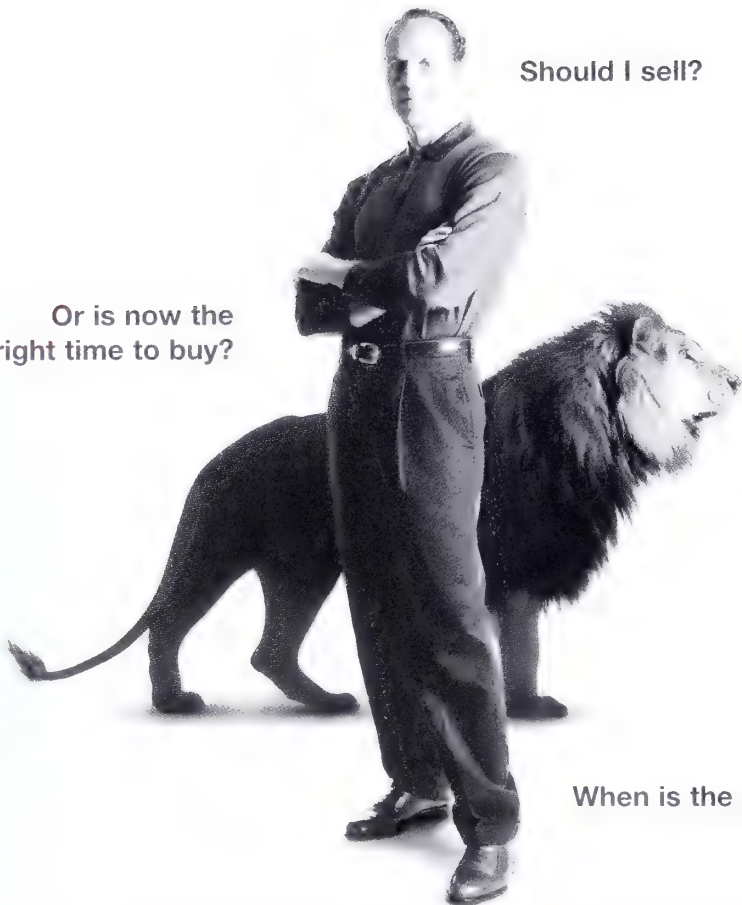
set in between prices and profits. Third-quarter earnings for the companies on the Standard & Poor's 500-stock index actually fell for the first time in seven years. The great run in stock prices for most of the '90s was based on solid, double-digit profit increases. The current market is less based on analysts' hot air. Earnings estimates from Wall Street could turn out to be as sound as advice from psychic healers.

The good news is that policymakers have turned their backs on fighting inflation to battling deflation and financial instability. In this first global deflationary recession since the 1930s, there are few Herbert Hoovers at the helm. Two quiet voices by the Federal Reserve have kept a serious credit crunch from developing. Central bankers in 22 countries have cut interest rates. Asian governments are hiking public spending. Even the International Monetary Fund, flush with a new line of credit, is offering countries more ammunition to protect their currencies.

The current stock market rally reflects relief that policymakers are soothing volatile financial markets. But it will take many months for corporations to rebuild their balance sheets. The market has gotten way ahead of itself—again. Now, sobriety is a sounder financial attitude than euphoria.

Or is now the
right time to buy?

Should I sell?



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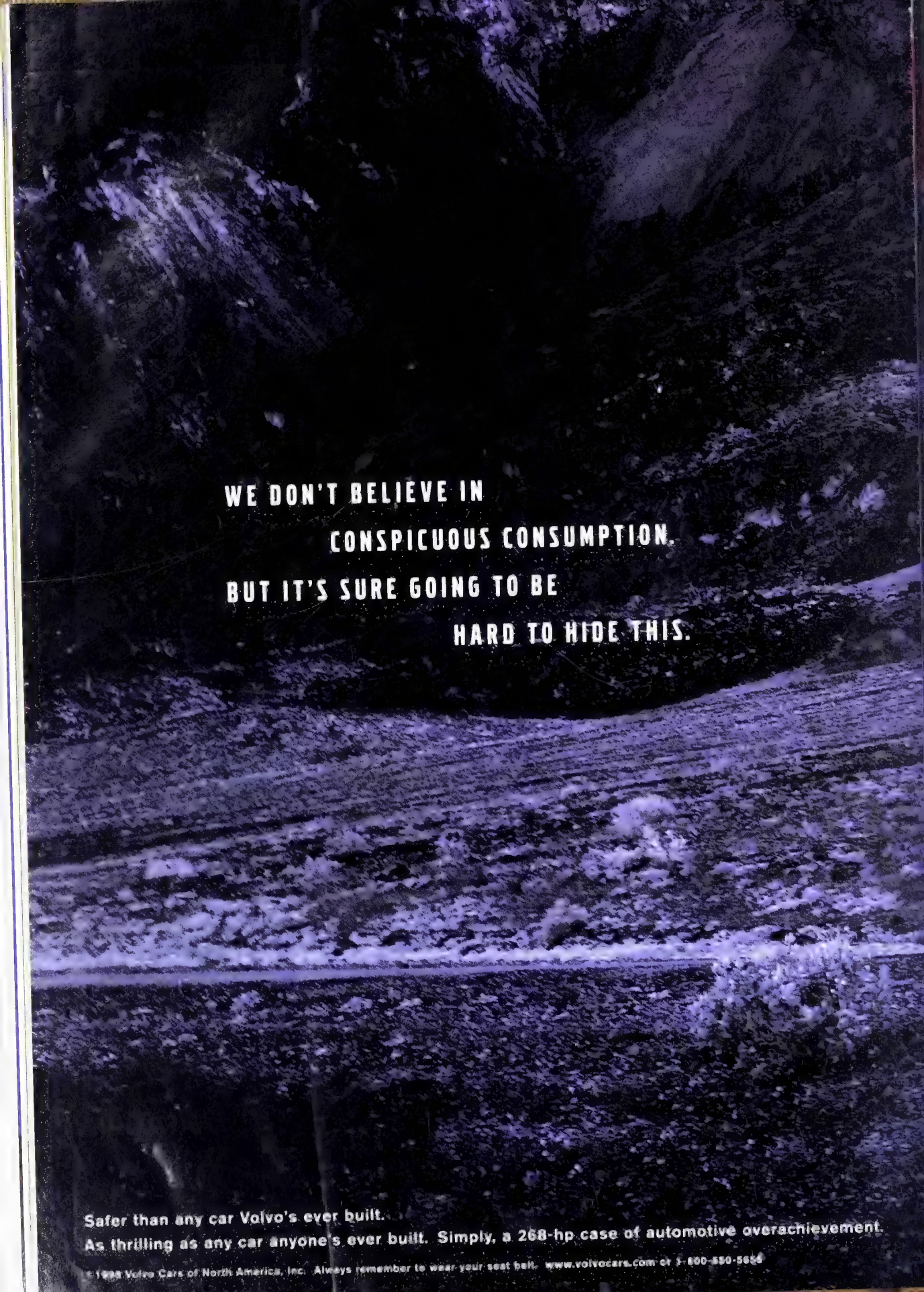
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NOVEMBER 23, 1998

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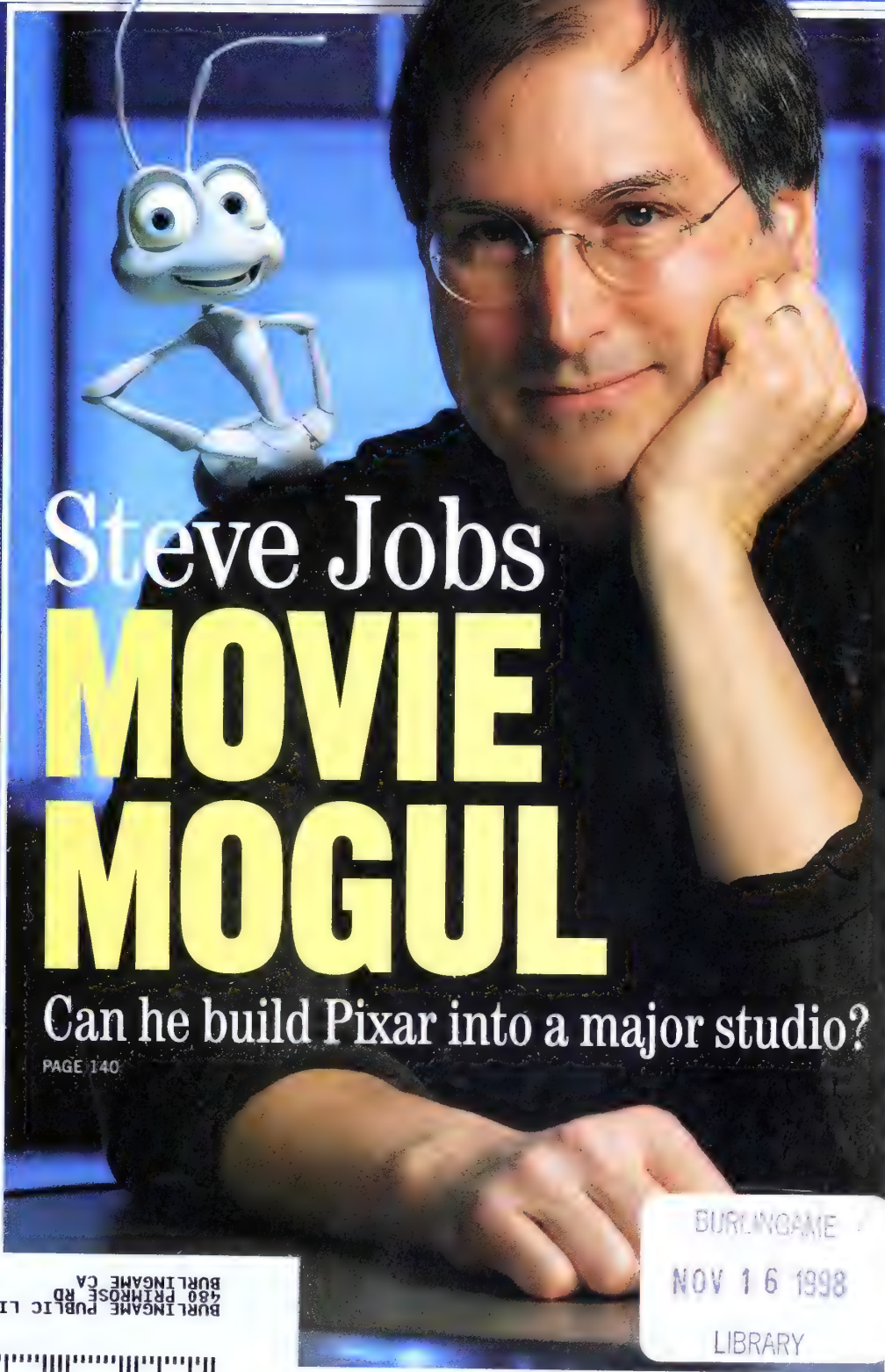
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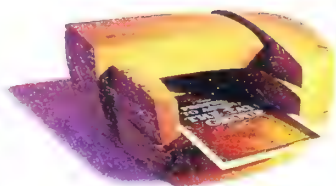
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NOVEMBER 23, 1998

Cover Story

140 STEVE JOBS, MOVIE MOGUL

Can Silicon Valley's renowned visionary morph Pixar into a full-fledged studio? The computer-animation house has already left viewers—and Wall Street—dumbstruck with *Toy Story's* technical wizardry and creative craftsmanship, and this season's *A Bug's Life* should provide more of the same. But will it be enough to dispel skepticism that he's just another Tinseltown wannabe?

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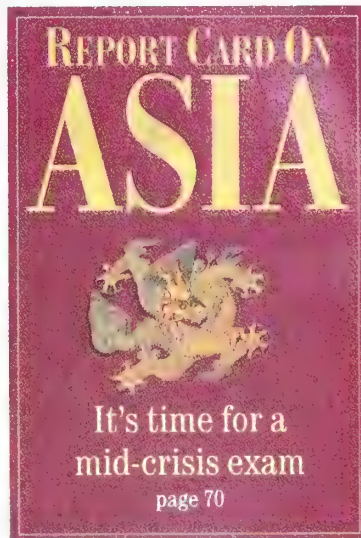
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Up Front

EDITED BY JOAN OLECK

NEW WORLD ORDER

DEMS ARE HUMMING GEORGIA ON MY MIND

IT COULD BE NEWT GINGRICH'S final nightmare. First, the Georgian led his party to an embarrassing election defeat; then he gave up his Speaker job and vowed to quit his congressional seat. Imagine the final insult: the Dems capture that seat.

GINGRICH:

More True, a Democratic win is a long shot in Gingrich's heavily GOP suburban Atlanta district. But here's the scenario: The still-unscheduled special election becomes a Republican blood-

bath. Say the current front-runner—moderate Gingrich ally and Georgia Board of Education Chairman Johnny Isakson—loses in the primary to a hard-right Republican. Meanwhile, the Dem candidate becomes pro-business centrist Michael Coles, who founded the Great American Cookie Co. The Dem dream scenario has Coles, who has run respectable races against Gingrich and GOP Senator Paul Coverdell, beating a Republican the Dems paint as an extremist. But Coles hasn't decided whether to jump in.

Even if he does, says pollster Claibourne Darden, any Republican will be favored in the district Gingrich has owned since '92. Still, Newt has had a year where everything that could go wrong has gone wrong—and it's not over yet. *Richard Dunham*

ECO TRENDS

MIXED REVIEWS FOR AN OZONE-EATER

IT HAS BEEN DUBBED THE "smog eater" because it consumes low-level ozone. On Nov. 5, the California Air Resources Board agreed to award pollution credits to carmakers using PremAir, a radiator coating from Engelhard Corp. As air flows through the radiator fins, a catalyst in the coating converts the ozone into harmless oxygen. Ozone results from the auto-produced precursors, nitrogen oxides and hydrocarbons. PremAir offsets about 25% of the ozone created by the cleanest cars.

For carmakers, an even bigger reward is pollution credits, which lower the emission average for their fleets. That's a plus for Volvo,

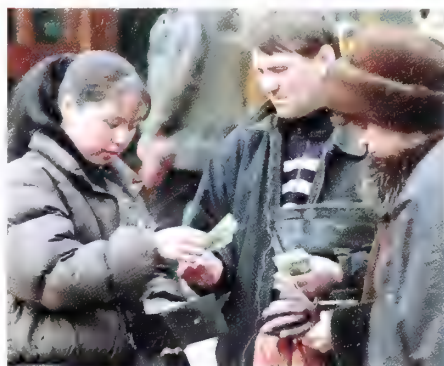
which already planned to install PremAir in its S80 model late next year. Ford Motor Co., however, has nixed PremAir. "It wasn't as effective as we had hoped," a spokes-

woman explains. Engelhard counters that PremAir's performance has improved since Ford's evaluation. But the Sierra Club argues that better performance isn't enough. PremAir's very concept fails, says the club's energy director, Daniel Becker, because ozone output should be cut at the source. "It's like selling cigarettes with an asthma inhaler," he says. Maybe it's more like selling cigarettes with filters. *Amy Barrett*



TALK SHOW "Louie Louie...oh-oh...me gotta go"

—Lyrics to the song Louie, Louie, recorded in 1963 by the Kingsmen, who regained the rights to the master recording of the considerable royalties from it



GLOBAL ECONOMY

DAMMING CHINA'S CURRENCY FLOOD

A SHARP CRACKDOWN ON THE familiar curbside money changers in Beijing, Shanghai, and Shenzhen has mainstream business worried. Police are swarming the bazaars of Chinese cities, shutting down black-market operators as part of Beijing's campaign against foreign-exchange violations. The reason? Officials' fears that the country's \$141 billion foreign-exchange hoard may not be enough to weather the Asian crisis.

Hence the effort to stamp out currency smuggling, which has channeled billions

TARGET: China's side exchange

out of China. Banks also policing transactions national supply depended. And with cause: New against the outflow of that foreign

change transactions be thoroughly documented ever. The result is that imate business feels squeezed. Multinationals are rev contracts and struggling collect overdue bills from tomers or trade companies the import middlemen.

Officials say these will disappear in time. Foreign execs are up. "The vigor with which enforcement is being tightened suggests growing concern," says Merrill Lynch & Co. analyst John Pinkel. "The economy more fragile. Beijing lets on? As any, then money changer: tell you, the signs are good." *Dexter Roberts*
Mark Clifford

THE LIST DECK THE MALLS

DATE WHEN MOST MALLS BEGAN HOLIDAY DECORATING IN 1998:

Nov. 1*

SANTA'S TYPICAL ARRIVAL DATE AT THE MALL IN 1998:

Nov. 21*

SALES INCREASE THAT MARKETING DIRECTORS FORESEE:

3%-5%

PERCENTAGE OF MALLS HOSTING CHARITY EVENTS THIS HOLIDAY:

91%*

PERCENTAGE OF MALLS DECORATING FOR HOLIDAYS OTHER THAN CHRISTMAS IN 1998:

18%*

AVERAGE NUMBER OF FULL-TIME SANTAS PER MALL IN 1997:

1.4

AVERAGE NUMBER OF PART-TIME SANTAS PER MALL IN 1997:

2.2

AVERAGE NUMBER OF CHILD VISITING SANTA IN 1997:

11

MEDIAN NUMBER OF HOLIDAY GIFTS WRAPPED PER MALL IN 1997:

4

HOLIDAY SONG PLAYED MOST FREQUENTLY IN 1997:

Jingle

SECOND MOST FREQUENT SONG:

White Christmas

*Planned From a fall survey of 200

DATA: INTERNATIONAL COUNCIL OF SHOPPING CENTERS



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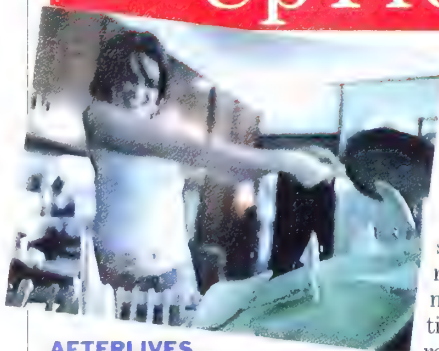
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Up Front



AFTERLIVES

DIVE-BOMBER IN THE WAR ON DRUGS

AS CEO OF JOHNSON & Johnson during the 1982 tainted Tylenol scare, James Burke made corporate history. Not only did he promptly recall millions of pill bottles but his candor about the tragedy and his willingness to invest in "tamper-evident" packaging became the stuff of PR legend and Harvard business school case studies.

Now, as chairman of the Partnership for a Drug-Free America, Burke, 73, is making marketing history again,



AD GAME: Burke, antidrug spot (top)

showing the power of public-private partnerships. Witness his Madison Avenue-sponsored outfit's provocative TV ad, where a teen smashes up her kitchen to show how heroin wrecks relationships. Because of network cuts in free airtime, Burke's group has already pried loose \$195 million in federal funds for such ads, and Burke says he won't leave the Partnership until he raises \$20 million for overhead. "I'm not really working," he says. "I'm

having a good time." There's reason to feel good: Drug use is down, though high-school-age kids remain a troubling exception. If Burke can reach those teens with spots on *Dawson's Creek*, use could slide there, too, though no solid link can be claimed. Says Burke: "Attitudes drive behavior."

Joseph Weber

AIR LINES

TOUGH LOVE FOR CARRY-ONS

IF YOU'VE EVER BEEN smacked in the face by your fellow passenger's way-too-big airline carry-on, you know the problem is way out of hand. So does United Airlines, which is attacking the problem by installing 9-in.-by-14-in. stainless steel templates in front of security X-ray machines.

Your carry-on doesn't fit? Return to check-in—or go home. Tests at Chicago's O'Hare International and Los Angeles International provoked no scuffles, airport spokesmen say. So United will install the gizmos at 60

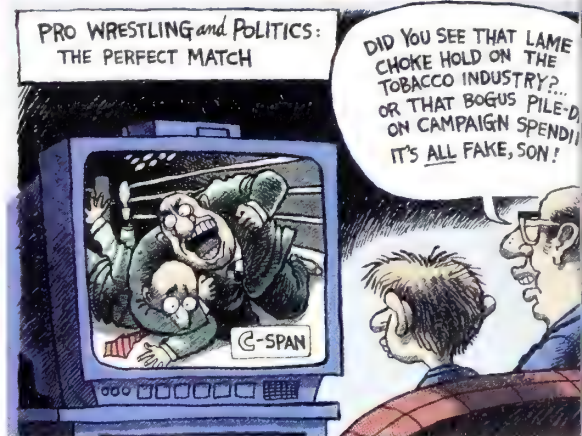


airports in the next two months. Cost? \$1 million. United's Kristina Price says it's worth it: "It's really a fairness issue." At least one business group has the moxie to disagree. Norman Sherlock, head of the National Business Travel Assn., says his members are "increasingly concerned" about the level of service afforded their corporate travelers. While the NBTA supports equal carry-on rules, Sherlock suggests greasing the skids with preferred check-in, advance boarding, free access to airline lounges, and reduced rates based on flight frequency. You riff-raff on discount fares can fend for yourselves.

Dennis Blank

DRAWN & QUARTERED

PRO WRESTLING and POLITICS: THE PERFECT MATCH



FASHION FRONT

PERRY ELLIS IS TALKING UP POETRY

POETRY "SLAMS"—FIERCELY competitive poetry readings popular with inner city kids—are going mainstream. With hubs in New York and Austin, Tex., the multiracial spoken-word movement begun in bars and coffee houses has already spawned a movie, *Slam*. Now, it has also spawned a link between the young urban market and yet another clothing designer.



SLAM MAN: Williams

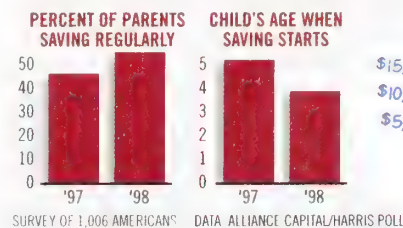
Remember rap and Tommy Hilfiger? Perry Ellis International marketing moguls hope slam will do the same for them, with a twist. "Our

customers are more contemporary, advanced, and ed in their thinking than red, white, and blue insists Max Garelick, Ellis CEO, referring to Hilfiger-wearing customers. Are those customers poetry? We'll soon find out. Ellis recently presented its first Breakthrough to movie co-stars and life poets Williams and Sohn. Did the poets quote Ellis? "I have seen them walk our line," Garelick admits. A deal is Wall Street analyst Max Gilliam of C&Co. She says, of the Ellis link: "When you mess with poetry, you've got a pretty large audience." Jeanette

THE BIG PICTURE

STARTING EARLIER ON JUNIOR'S SHEEPS

More parents today are saving toward their children's college, and they're starting earlier: when their child is an average 3.8 years old in 1998, vs. 5.1 years in 1997. That makes a \$3,750 difference for a \$50,000 college savings account invested at a 6% annual return.





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four years, there may be 8 billion. By the year 2000, there'll

be something like a thousand new companies providing phone,

wireless and Internet services. (Guess who's ready to work with all of them?)

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Equium



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THE MUSIC BUSINESS ISN'T OUT TO THWART TECHNOLOGY

Contrary to the assessment in "Target pirates—not technology" (News: Analysis & Commentary, Nov. 2), the Recording Industry Assn.'s suit against Diamond Multimedia Systems Inc. is about advancing technology, not thwarting it. To make the Internet a winning proposition for all parties—information-technology and consumer-electronics industries, fans, and artists—we must work together to protect copyrighted music against unauthorized uses. This legal action is not about targeting technology as the demon. It is about raising awareness of rampant Internet piracy.

The RIAA's energies are focused on strategies to make digital music a winning proposition for everyone. Litigation is only one of those strategies; education, legislation, enforcement, and technological solutions are a few of the others.

Every RIAA strategy supports one goal: ensuring greater access to a broader depth of quality music on the Internet. Rather than feel threatened by the changes that come with technological advancement, the recording industry welcomes the role of progress. Indeed, technology has changed the way consumers interact with the music they love. However, it's our mission to ensure that those changes are positive—creatively and commercially.

Hilary Rosen
 President and CEO
 Recording Industry Assn.
 Washington

POLITICOS: IF YOU SELL OUT, DON'T SELL YOURSELF CHEAP

In "It's revenge of the nerds on Capitol Hill" (Washington Outlook, Nov. 2), I suggest the politicians rethink the amounts of donations they collect. It's bad enough that votes can be bought.

To be bought, however, for such small amounts makes the politicians involved look not only unethical but also cheap and stupid.

In the same issue of the magazine you state that Microsoft Corp. has a billion in cash alone. I'm sure they could get more for their votes—\$264,316 and that the Democrats could get more than \$95,000 with a little horse-trading. At the very least, politicians should start reading BUSINESS WEEK, so that they can learn a little about the cash flows of American corporations.

Richard Strozzi
 Fremont, Cal.

BUYING CONGRESS FOR A PITTANCE

"It's bad enough that votes [on Capitol Hill] can be bought. But to be bought for such small amounts makes the politicians look not only unethical but also cheap and stupid"

BRING ON THE GERMAN PRIVACY COPS

I applaud Germany's new Article that requires all countries to abide by Germany's strict privacy laws ("European privacy cops," International Business Outlook, Nov. 2). Recently, a telemarketer called to suggest I invest in an oil well. I was so surprised by his audacity that I asked how he got my name and phone number. Unfortunately, he could not answer my question, and I never invested in the well. Presumably, German data police somehow protect citizens from telemarketers. The man telemarketer would have to answer the question: "How did you get my name and number?" But what if I protect a German citizen from an American telemarketer? This is part of the reason Article 29 was passed. I wish had the same rights Europeans have.

Roger Pommerehne
 Roanoke, Va.

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RECTIONS & CLARIFICATIONS

's still not Miller time" (News: Analy- Commentary, Nov. 16), the photo cap- should have stated that Miller's new egypt includes a move away from edgy not toward them.

ERS TRUST VES MORE CREDIT

r man in Frankfurt, Thane Peter- provides American readers with interesting insights ("Bankers Trust last thing Deutsche needs," Inter- al Business, Nov. 2). However, the piece is interesting, it is rather l of multinational financial enter- such as Bankers Trust Corp. BT ounded in 1903 by Henry Davison e care of the trust business of com- l banks; it developed within a short an international network, through pondent banking, to handle inter- al trust business. After it joined ederal Reserve System in 1917, BT to evolve as a multiservice bank. only after the Second World War ventured into retail banking.

ing the ensuing years, BT real- nat it did not have the "distinct tence" to excel in consumer bank- the 1980s, it divested retail bank- lowever, the currency business from the Mexican peso deals in and the financial and legal backfire ts derivative business made it, as on calls it, "a troubled target." hort, BT is a venerable franchise, ere is considerable evidence to st that a firm that has a strategic o acquire a troubled brand and t around is likely to fare better ne that acquires a successful firm ays a heavy premium. Recall r Oats Co.'s acquisition of Snapple age Co. Besides, a person as emi- s Paul Volcker would not continue irector if the firm were as impru- managed as Mr. Peterson's in- ing commentary conveys.

Srinivas B. Prasad
Mount Pleasant, Mich.

ECTING APPAREL WORKERS ORK IN PROGRESS

r description of the Responsible el Production (RAP) initiative en- by the American Apparel Manu- ers Assn. ("A floor under foreign es?" The Workplace, Nov. 2) took marks on union participation in tiative out of context, leaving the ronic impression that a program ed to improve workplace standards worker.

Many of the AAMA members who are associated with the RAP initiative have long histories of working effectively and cooperatively with trade unions in the U.S. and abroad. Indeed, respect for workers' right of free association is one of the cornerstones of the RAP principles that independent monitors must verify before any apparel factory can receive a certification of compliance.

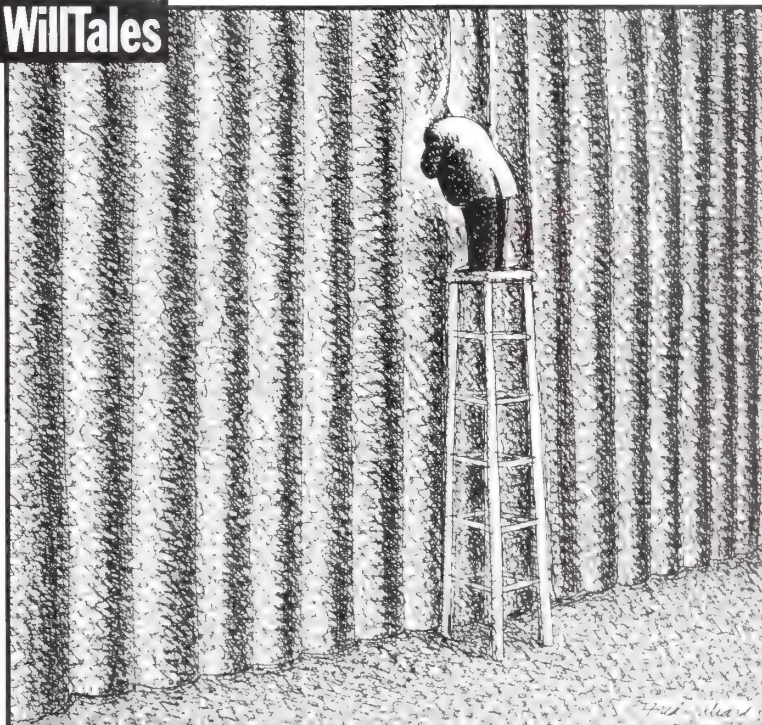
The Responsible Apparel Production initiative began early in 1998, at a time when it became clear that other initia-

tives to improve workplace conditions in the apparel industry were being ham- strung by ideological disputes between the interested parties. The experience of the Apparel Industry Partnership is illustrative. After more than two years of debate and deliberations, and despite the best efforts of the Labor Dept., the trade union representatives have ap- parently chosen to withdraw from the partnership and oppose the final agree- ment reached by other partners.

The Responsible Apparel Production

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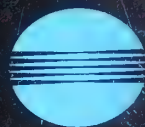
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Readers Report

tive does not seek to avoid the interest of the labor unions or of other representing worker interests. In the RAP process has drawn extensively upon the experience of a diverse group of individuals and organizations, including those that have special experience with workers. However, it's far from certain that U.S. trade unions will ever support our endeavor, given their categorical rejection of similar collaborative schemes. Nonetheless, we remain open to the possibility that organized labor will reconsider its position. Our hope is that the RAP process and the independent board that oversees it will be inclusive of all the stakeholders in the apparel industry—whether they are manufacturers, retailers, consumers, or others.

Larry K. Martin
President
American Apparel
Manufacturers Assn.
Arlington, Va.

If you think that anti-sweatshop policies overseas face tough sledding, you should look at how major companies have refused to adopt anti-slave-labor resolutions. The biggest world problem with labor is the Chinese *laogai* system of 1,100 factories, one step below sweatshops.

Stock owners who are alarmed at corporate America's willingness either to forgo the advantage of these or to look for other ways have introduced anti-labor resolutions at corporations' annual meetings over the past five years. But managements have opposed such resolutions and worked hard to defeat them. It does not bode well.

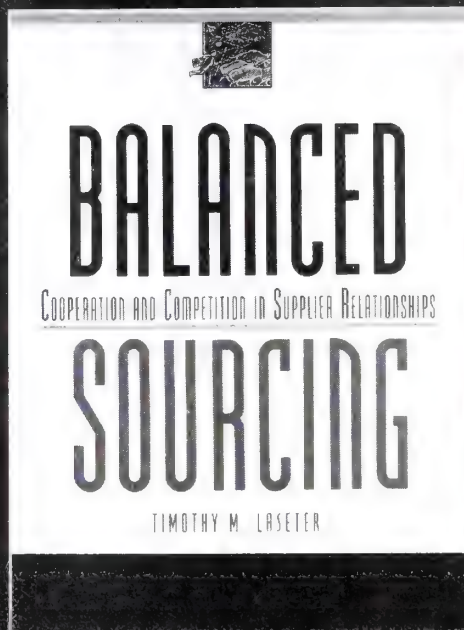
Carl Olson
Chairman
State Department Watch
Washington

READERS SHOULD ASSESS THE RISKS FIRST

In response to "The global meltdown: what to do next" (Economic Viewpoint, 12/6), the statement that small companies were smaller than the institutions managing the capital does not make sense. There were many small companies that leveraged themselves and did not face capital constraint. One would be surprised reading "Malaysia could do worse than this economic plan" (Economic Viewpoint, Nov. 2).

Mr. Tyson's approach for a continuing loan is an after-the-fact solution. Lenders should have known the risks before granting the loan. Ms. Tyson also

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Melissa Martinez

Got a recipe from next door (pumpkin ravioli), a baby-sitter from down the block and today's closing stock quotes from London, Bombay and Kuala Lumpur.

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Readers Report

icates additional loans to Japan, out even the required restructur- of their financial infrastructure. Her all approach seems to be to throw ay at the problem and put contin- ies on loans in the future.

Glenn Nelson
Chicago

GOT NO REQUEST A LOAN

"How a blood feud in Malaysia out of control" (International Busi- Nov. 9), you stated: "According to ar's associates, Daim called the CEO ank Bumiputra, Abdul Aziz Oth- and asked him to lend \$20 million company in trouble. After checking Anwar, these sources say, Aziz told i no." There has never been any est by Y.B. Tun Daim Zainuddin e as Bank Bumiputra's CEO or to ank's management for any loan to ranted to any company.

Dato' Abdul Aziz Hj. Othman
CEO

Bank Bumiputra
Kuala Lumpur

or's note: BUSINESS WEEK made re- d attempts by phone and fax to i Abdul Aziz for comment.

RANKING B-SCHOOLS: THE HIDDEN CRITERIA

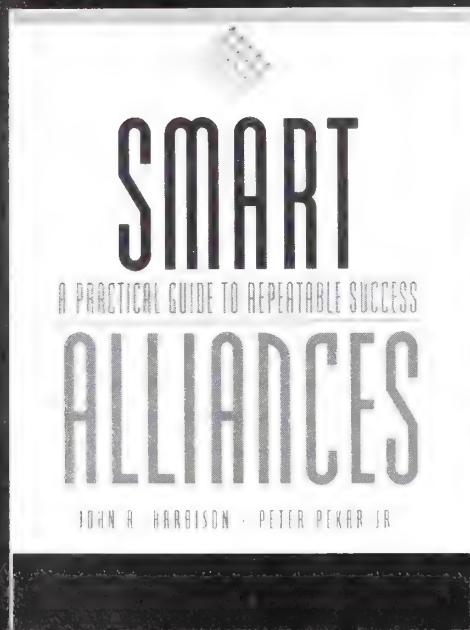
am always amused by the "flying stics" that are used to evaluate thing as subjective as an educa- ("The best B-schools," Special Re- Oct. 19). These are good factors, at some level one can only have r buckets labeled "good," "bad," "," and so on.

ie reader said that Harvard should be ranked No. 1 because of the av- e graduate salary. I assume that Harvard grads are not hired by rich relatives or connections, but a few such hires will greatly skew verage. It is also debatable that a et prices things perfectly according lue (ask [Long-Term Capital Man- ent] about their experience about g and averages). As someone who egrees from schools both on and f your list, my experience is that hools hire great researchers and rs and leave the great teachers to er schools. Don't waste the tuition y—unless someone else is paying.

Jim Tomkinson
New York

garding the quote: "The first-year load is too much... and hurts those

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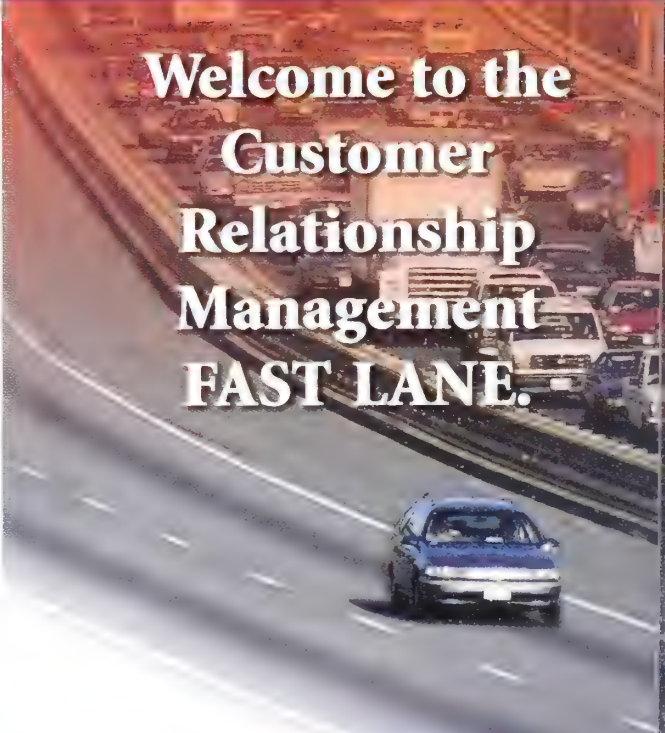
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Readers Report

le needing to spend a significant amount of time in the job search process." Am I missing something here? The purpose of obtaining an MBA to prove an individual's knowledge, skills, abilities, or simply a preparation for the future, potentially very lucrative, interviews? I obtained an MBA by studying in the evening, after a full day of work. There was no allowance for me by being given a smaller workload, and none was asked for. I am a recent MBA graduate and as a recruitment recruiter for a business school, I read your article with great interest. However, I noticed the omission of overseas business schools as an option for students who want a global view. I am the only American in my graduate business class, I found an overseas business education provided experience that I wouldn't have found in America. With the globalization of many businesses, an overseas MBA provides many tangible benefits. By conducting my MBA abroad, I developed an understanding of how the U.S. is viewed from other countries. An overseas business schools provide direct and immediate immersion in foreign business culture. In addition, by conducting my studies in England I witnessed the historical context of one of the key factors influencing the business environment this decade: increased European economic integration and the onset of the single currency. Furthermore, the high number of foreign students on our program (60% national students representing 20 different countries) provided a diverse learning environment, as well as long-lasting friendships and networking opportunities throughout the world.

Kevin Medley
Madison, Conn.

As a recent MBA graduate and as a recruitment recruiter for a business school, I read your article with great interest. However, I noticed the omission of overseas business schools as an option for students who want a global view.

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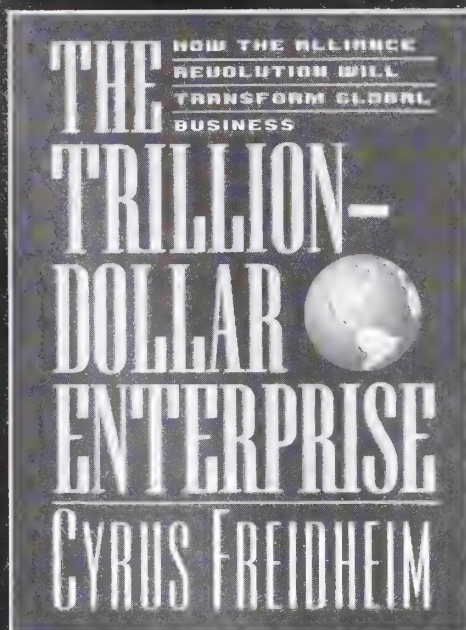
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Barbara Coward
School of Management
University of Bath
Bath, England

DURAGING WORDS M A RUGRATS FAN

I am a 13-year-old boy who read your article about how tough it is to get kids to age and younger to watch certain shows ("Romancing the *Rugrats* crowd," *Entrepreneur*, Nov. 2). I watch a lot of cartoons—mostly all of them. I have seen

GO BEYOND BILLIONS.



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Readers Report

...e *Rugrats* shows that could be
n. I like Nickelodeon better than
other channel. From watching car-
..., I get a creative mind to write
es in school for my classmates. I
going to see *The Rugrats Movie* on
ksgiving with a friend.

is article taught me a lot of things
the television business. I read
paper articles every day with my fa-
This was my first article from BUSI-
WEEK, and I thought it was pretty
The reason why Nickelodeon's rat-
are so high is because young view-
ke me watch it so often. As soon as
n on the television I turn to Nick-
on and see what's on. Many of my
ds watch *Doug*, *Rugrats*, *Blue's*
t, and *The Busy World of Richard*
t. Keep up the good work.

Jake Hilsenrath
White Plains, N. Y.

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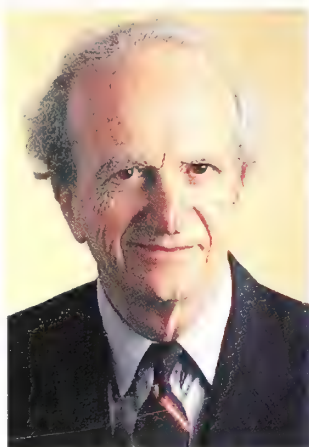
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BY GARY S. BECKER

ONLY LABOR REFORM WILL GET EUROPE WORKING AGAIN



INCENTIVES:
Stubborn
joblessness
won't budge
unless
employers are
given greater
flexibility
in hiring
and firing

Persistent high unemployment is probably the single most important factor behind the defeat of ruling parties on the political right throughout Western Europe. Unfortunately, the policies of the winning Socialists, Social Democrats, and other parties on the left are more likely to lower rather than raise employment.

Unemployment is behind the public conflict between the new political leaders of Germany and France, who want a loose monetary policy, and their central bankers, who favor a continuation of tighter money. This conflict will become more bitter after the introduction in early January of the common currency, the euro, and the European Central Bank. This will be especially so if the economic problems of Asia and other nations begin to have a larger impact on European economies.

Average unemployment rates in the European Union have exceeded 10% since the early 1990s, and, despite minor improvements, they are still almost 12% and 10%, respectively, in France and Germany. From 1980 to the present, unemployment in western Germany ballooned from half to almost double the rate in the U.S. Unemployment in eastern Germany is close to 20% of its labor force. Even worse, almost a third of those unemployed in France and Germany have been out of work for more than a year, compared with about 10% in the U.S.

QUICK RETREAT. I argued in previous columns that rigid labor markets and high social security and other taxes on employed workers explain Europe's excessive unemployment. Yet Helmut Kohl and the Christian Democrats took only modest actions to reduce labor taxes and give companies more flexibility over employees. In addition, Kohl's government extended western Germany's labor-market inflexibility to eastern Germany. The previous French conservative government, headed by Jacques Chirac, initially challenged early retirement and a few other French sacred cows, but it quickly retreated when faced with work stoppages by civil servants and truckers. The government even raised an already high minimum-wage rate.

The recently elected German Social Democrats, headed by Gerhard Schröder, have promised to rescind the few labor reforms that took effect under Kohl, while Lionel Jospin's French Socialists have already raised the minimum wage several more times. The

Socialists also plan to cut the working day to 35 hours during the next several years, spread around an allegedly fixed number of jobs. Italy and other European governments are attracted to this work-sharing approach to unemployment. However, studies of past experiences with work-sharing arrangements show that forced reductions in hours per worker tend to reduce rather than expand employment because they raise the effective cost of labor.

MARKET MENTALITY. These governments blame their countries' high unemployment on job-reducing modern technologies and competition from poorer nations. Yet the United States and Britain face the same competition in technology as Continental Europe does, yet they have much lower unemployment. The crucial difference lies in the much greater flexibility and freer labor markets in the two nations. Britain's Tony Blair is the leader of a labor-oriented party in Europe who publicly recognizes that jobs can be easily created by giving companies appropriate incentives.

New Zealand and Chile discovered that tractable unemployment problems melt away after the government cuts taxes on workers and passes labor-market reforms that increase the flexibility of companies in hiring and firing and charging employees. Both countries have been harder hit by the Asian crisis than European countries, since they ship much of their goods to the Pacific. Although unemployment rates in Chile and New Zealand have risen during the 18 months since the collapse of Asia's finances, they are still below those in Europe.

If the explanation of high European unemployment rates is so clear, why are governments reluctant to reform their labor markets toward the so-called Anglo-American model? Although many excuses and explanations have been offered, politics is the powerful reason. Strong unions, "insiders" with well-paying jobs, and other groups tend to hold on to their perks and privileges out of fear of losing these votes discourages parties on the right from making major labor market reforms.

The shame is that the social problems stemming from having so many unemployed young and unskilled people could be avoided if European governments had the political courage to reform and liberalize their labor markets.

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution.



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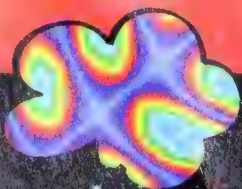
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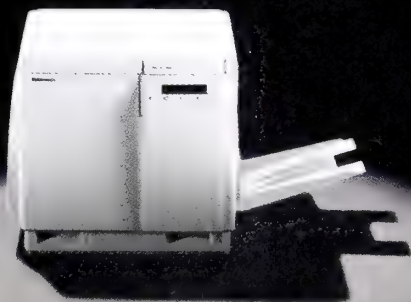


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SENE KORETZ

EXCHANGE RATE U: HOW BAD?

weakening U.S. competitiveness

Many observers tend to blame the exploding U.S. trade deficit on the omic debacle in Asia. And there's doubt that collapsing exports to the on, along with a pickup in imports, the main factors behind America's deteriorating trade position. But a closer at trade statistics suggests that ething more may be at work: the on of U.S. competitiveness due to



ing currency exchange rates. he fact is, the accelerating decline in exports this year is evident in al-all product groups, including agri-al items, industrial materials, and al goods. And slowdowns are ap-nt in shipments to Mexico, Canada, Latin America, as well as to Asia Eastern Europe. Even exports of ices have started to decline.

recent Labor Dept. report under-es how much currency swings have ged the global labor-cost rankings in w short years. As recently as 1995, U.S. was the preeminent low-cost r producer in the industrial world, an hourly compensation rate of 19, well below rates of \$31.85 in nany, \$23.66 in Japan, \$19.34 in ice, and \$29.30 in Switzerland. By year, however, Japan's costs ex-ed U.S. levels by a mere 6%, and labor-cost premium for all of Eu-had shrunk from 29% to 12%.

relative labor costs have also been pping among other U.S. trading ners. From 1996 to 1997, compen-n rates fell from 94% to 91% of . levels in Canada, for example, and an average 39% of American levels

to 36% among the Asian Tiger contin-gent of Hong Kong, Korea, Singapore, and Taiwan. Although Europe's curren-cies have strengthened a bit recently, most of these nations' currencies have fallen even more against the dollar over the past year.

Currency shifts are only part of the story, of course. Economists Stephen S. Roach and Joseph P. Quinlan of Mor-gan Stanley Dean Witter note that U.S. industry is still far ahead of the game in the kinds of measures that foster long-term competitiveness: labor flexibility, restructuring, and technology invest-ment. At last count in 1996, for example, the U.S. spent 4.1% of gross domestic product on information technology, vs. Japan's 2.5% and Germany's 2.1%.

The question is for the short run. Es-pecially over the past year, the U.S. has acted as the buyer of last resort to an increasingly troubled world econo-my. As long as the U.S. economy was strong (and inflation-free), the widen-ing trade gap was regarded as a posi-tive development. The big fear now is that trade's impact could turn sharply negative if the U.S. economy slows sig-nificantly in the year ahead and other economies remain mired in recession.

'MORAL HAZARD' ON THE MOUND

Economists mull a baseball puzzle

L last year, we described a study by Brian L. Goff of Western Kentucky University and William F. Shughart II and Robert D. Tollison of the University of Mississippi. The study noted that the number of hit batters in the American League rose sharply after it adopted the designated-hitter rule in 1973. The economists concluded that this was due to "moral hazard"—that is, American League pitchers threw with less caution at opposing batters because, unlike National League pitchers, they no longer had to take a turn at bat and face possible retaliation if they hit someone.

Now, two short articles disputing this view have appeared in the same jour-nal, *Economic Inquiry*. In one, Steven D. Levitt of the University of Chicago ar-gues that any rise in "plunked" hitters in the American League probably occurred because pitchers are bad hitters and are therefore less likely to be hit than other batsmen. Replacing them by designated hitters thus tended to raise the number of hit batsmen. Levitt also finds no cor-relation between the frequency with

which individual pitchers in the National League hit opposing batsmen and their chances of being hit while batting them-selves (on average, just once for every 50 times one of them hits a batter).

In the second article, economists Gre-gory A. Trandel, Lawrence H. White, and Peter G. Klein of the University of Georgia take the same argument a step further, noting that retaliation by one team for a hit batsman is far more likely to be directed at sluggers, such as designated hitters, than at weak-hitting pitchers. Thus, pitchers in either league face little risk of reprisal, undercutting the "moral hazard" theory. Predictably, National League pitchers are plunked less frequently than American League designated hitters.

Issue settled? Not necessarily. In re-sponse, the original authors claim sta-tistical tests still support a "moral haz-ard" explanation. Like baseball itself, arguing about the game remains a na-tional pastime—even among economists.

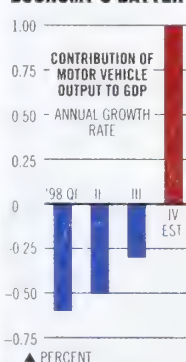
DETROIT SHIFTS TO THE FAST LANE

Rising output will bolster GDP

W ith the index of leading indica-tors flat in September for the second month in a row and either flat or down in four of the past five months, some economists predict that the long-awaited growth slowdown will materialize in the fourth quarter. Don't bet on it, advises Maury N. Harris of PaineWebber Inc.

Why? Motor-vehicle sales have been so strong (October was one of the strongest months in history) that auto makers are planning a sharp pickup in production in the current quarter. After three straight quarters of falling output, which subtracted an average of nearly half a percentage point from the economy's growth rate, the sched-uled surge in out-put should add a full percentage point to gross domestic product in the fourth quar-ter, Harris esti-mates. As a re-sult, he expects growth to come in at a still healthy 2.5%.

A BOOST FOR THE ECONOMY'S BATTERY



BY STEPHEN H. WILDSTROM

PROJECTORS FOR THE LAPTOP SET

It's getting a lot easier to take a slick presentation on the road

Creating a slick presentation on a computer is easy, but taking it on the road has long been a nasty adventure. You can convert your slides to 35mm transparencies. But that requires waiting several days for processing, costs a fortune, and forecloses any last-minute changes. You can print the slides out on transparencies for an overhead projector, but that means standing at the projector shuffling pages. Showing the presentation on your laptop's screen works only if your audience consists of just two or three viewers.

What the world needs are easy-to-use video projectors that show computer-generated presentations on a big screen, are affordable, and don't require a pack horse to carry them around. Good news: They're here.

TINY MIRRORS. I tried three of the new breed of personal projectors—the Epson PowerLite 5500C (\$4,999), the In Focus LP425 (\$4,150), and the NEC MultiSync LT80 (\$4,100). All weigh in at under 10 pounds and are compact enough to travel in a laptop-style bag. The latter two use a new technology from Texas

Instruments Inc. called Digital Light Processing, which creates an image using more than a million tiny movable mirrors mounted on a chip. The Epson employs a variant of the LCD technology that is used in laptops. While display-on-a-chip technologies used in the NEC and the In Focus projectors could lead to cheaper and lighter machines in the future, I noticed no significant advantages in



these models.

Beyond price and bulk, the units have solved the biggest hassle of using a projector. Until the latest generation, you had to match the resolution of your laptop display to the resolution of the projector or it wouldn't work right. Now, the projectors automatically adjust to the display settings of a PC or a Macintosh laptop. And nearly all laptops make it possible to see an image on

the screen while also sending it to the projector, a convenience in controlling your presentation. The projectors will amplify the audio from your laptop and will accept input from a standard video source, such as a VCR.

At just 6.8 pounds—less than some laptops—the In Focus is the lightweight champ of the field. It's also the brightest, putting out 700 lumens in a standardized test. (All three projectors worked best in a darkened room but performed acceptably under moderate room lighting.) But the In Focus projector has a couple of drawbacks. It has a fixed lens, so the only way to control image size is by changing the projector's distance from the screen. And the remote control is a \$70 option.

CALLING ALL BICEPS. If you're willing to trade a bit of portability for features, Epson and NEC offer good choices. The Epson is considerably heavier, at 9.4 pounds, and a bit dimmer, at 650 lumens. It offers stereo sound rather than In Focus' single speaker and includes a zoom lens and a remote control, which also doubles as a wireless mouse to control your computer. While the NEC is the heaviest, at 9.9 pounds, and the dimmest, at 600 lumens, it's also the cheapest.

All of these projectors have limitations. They are designed for a meeting room or a classroom, not an auditorium or a big ballroom. And about the best thing that can be said about their audio systems is that they are louder than those of a laptop. But for anyone whose job depends on impressive presentations, these projectors can offer a competitive edge.

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RIGHT TURN FOR LEFTIES

Trackballs from Logitech International (800 231-7711 or 510 795-8500) are popular with those who want the precise cursor control of trackballs without the grease and grime that can quickly disable them. But until now, Logitech's Marble Mouse, which use optical sensors rather than the usual



mechanical rollers to follow the motion of the ball, have been designed strictly for right-handers. The new \$49 Marble Mouse works for both lefties and righties and will run on any flavor of Windows without additional software. Now if they could just add one of those handy wheels to scroll pages up and down, it would be perfect for this southpa

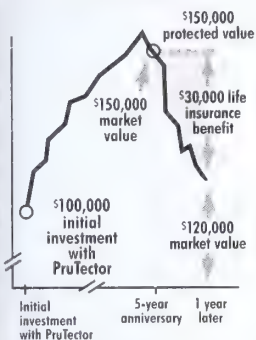
SOFTWARE

DEMYSTIFYING WIN98

One common complaint about Windows 98 is that it comes with no manuals. There are a lot of solutions, but for folks who want more than the basics and don't mind messing around under the hood, *Windows 98 Annoyances* by David A. Karp (O'Reilly & Associates, \$24.95) is an excellent choice. It helps you cope with the many quirks of Win98, such as understanding what's really going on when you get a message like "msgsrv32.exe has performed an illegal action and will be shut down." *Annoyances* also offers tons of convenience- and performance-enhancing tips. Plus, it reveals how to get the Network Neighborhood and Microsoft Network icons off your desktop.

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In this hypothetical example, an initial investment of \$100,000 in a Prudential mutual fund grows to \$150,000 by the fifth anniversary of purchase. PruTector locked in \$150,000 as the protected value on that anniversary. One year later, the investment declined to \$120,000. If the insured were to die at that time, beneficiaries would still receive \$150,000 (\$120,000 market value plus \$30,000 life insurance benefit). This hypothetical example is not intended to represent any specific investment, and is not indicative of past, present or future performance. Depending on market circumstances, the life insurance benefit could be zero.

Introducing PruTectorSM — an affordable new term life insurance product designed specifically to help Prudential mutual fund investors seek rewards from the stock and bond markets with greater peace of mind.

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PruTector is designed to protect the value of your Prudential mutual funds for your beneficiaries. It ensures that the amount they receive is never less than the "protected value," which is the higher of:

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- the value of your funds increased at a 5% annual rate of return — based on the initial date of coverage.²

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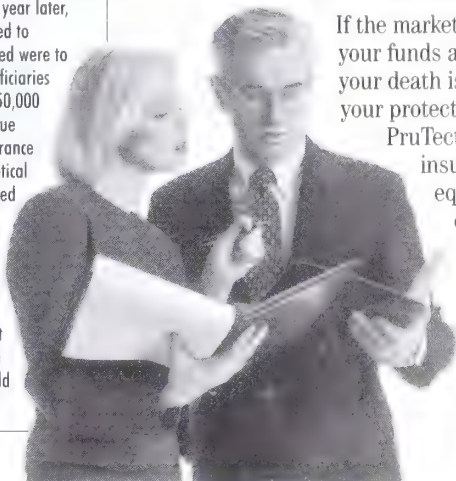
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AT ANY COST

Jack Welch, General Electric, and the Pursuit of Profit

Thomas F. O'Boyle

Knopf • 449pp • \$29.95

JACK WELCH, CORPORATE VILLAIN?

John F. Welch Jr. is hardly infallible. The man who has led General Electric Co. as chairman and chief executive for the past 17 years has made some big mistakes, including his acquisition of securities firm Kidder, Peabody & Co. A tough and uncompromising leader, Welch has also made some widely unpopular moves—from laying off tens of thousands of employees to ditching businesses that had long been part of GE's legacy.

But Welch, who—according to survey results—runs the most admired corporation in the world and who has delivered more wealth to shareholders than anyone other than Microsoft Corp.'s Bill Gates, doesn't deserve the unflattering portrait found in Thomas F. O'Boyle's *At Any Cost*. The author charges that it is financial gamesmanship, not superior leadership or technological innovation, that is at the root of Welch's success. He maintains that the CEO's driving nature has caused many of the company's employees to take illegal actions to deliver results at any cost. Welch, he claims, has taken humanity and compassion out of business, turning his back on employees and communities in the interest of profit.

Books about Welch and his revolution at GE are not rare. *At Any Cost* is the third Welch account this year, following *Jack Welch Speaks* by Janet C. Lowe and *Jack Welch and the GE Way* by Robert Slater, that author's third adulatory book on Welch's management approach. But O'Boyle, a former reporter at *The Wall Street Journal* who is now assistant managing editor at the *Pittsburgh Post-Gazette*, is the first to take an extremely critical look at Welch.

O'Boyle is an able writer who has done a remarkable amount of research. In the past six years, he has interviewed some 320 people, pored over thousands of pages of court documents

and newspaper clippings, and traveled through many GE towns, from Pittsfield, Mass., and Schenectady, N. Y., to Mexico's *maquiladora* region. In the process, he has unearthed every shred of negative news on GE from the past century.

Unfortunately for O'Boyle, there isn't much muck to rake. The author relies heavily on the views of disgruntled former executives who have filed lawsuits against the company. More than once, this results in accounts that are unfair, misleading, and often just plain wrong.

At one point, for example, he writes that "the connection between the severity of Welch's demands and the occurrence of repeated scandal was a clear cause and effect, as transparent as glass." The author's first bit of evidence: a 1985 grand jury indictment of GE over a defense contract. GE pleaded guilty to defrauding the government, admitting that some managers had doctored 108 time cards out of some 5,000 submitted by hourly workers. Trouble is, the practice occurred in 1980, before Welch was even chief executive.

Or consider this travesty. The author devotes a full 54 pages to the 1991 axing of Edward J. Russell, head of GE's industrial diamond business and to his allegations that he was dismissed because he alerted the Justice Dept. to an alleged price-fixing scheme with the De Beers diamond cartel. But a judge threw out two of three wrongful-discharge counts in Russell's own civil lawsuit against GE. As part of a settlement of the third, the executive recanted. "I am now aware that GE removed me based on its view of my performance and not because I was a whistleblower," he wrote—something the author never

mentions. O'Boyle does acknowledge Russell's admission that he had "no personal knowledge of any antitrust wrongdoing or any other illegal conduct by GE personnel." Not surprisingly, a federal judge threw out Justice's case before GE began to put on its defense. Yet, the author tells the story as if the sell's accusations were fact.

O'Boyle not only tries to lay blame for nearly every controversy on Welch's feet but also takes aim at several of Welch's major strategic decisions. He says, for instance, that Welch was "misguided" in trading GE's consumer electronics business in 1987 to Thomson for the European company's medical-equipment business and cash. This conclusion is nonsense: The former Thomson unit is now a successful and profitable part of GE's global medical equipment operation, helping to make that division No. 1 in its field in several countries worldwide. Meantime, earlier this year, Thomson closed the last major

assembly plant in the United States because of losses.

Had Welch managed the company in the way O'Boyle suggests, the CEO would have been another Roger Smith or John Akers, unwilling to take the risk of change necessary to prevent a debilitating decline at an industrial giant. Among other things, Welch would have kept GE in its core, low-margin industries, such as consumer electronics. He would have

funneled unlimited research and development money into these efforts, rather than aggressively expanding in financial services, which has been a bonanza for GE. He would have guaranteed employment of tens of thousands of employees the company no longer needed.

Much of O'Boyle's material makes for some entertaining, but not very enlightening, reading. However, the entertainment value comes at the expense of the author—for in the end, O'Boyle's attacks are not at Welch's credibility but on his own.

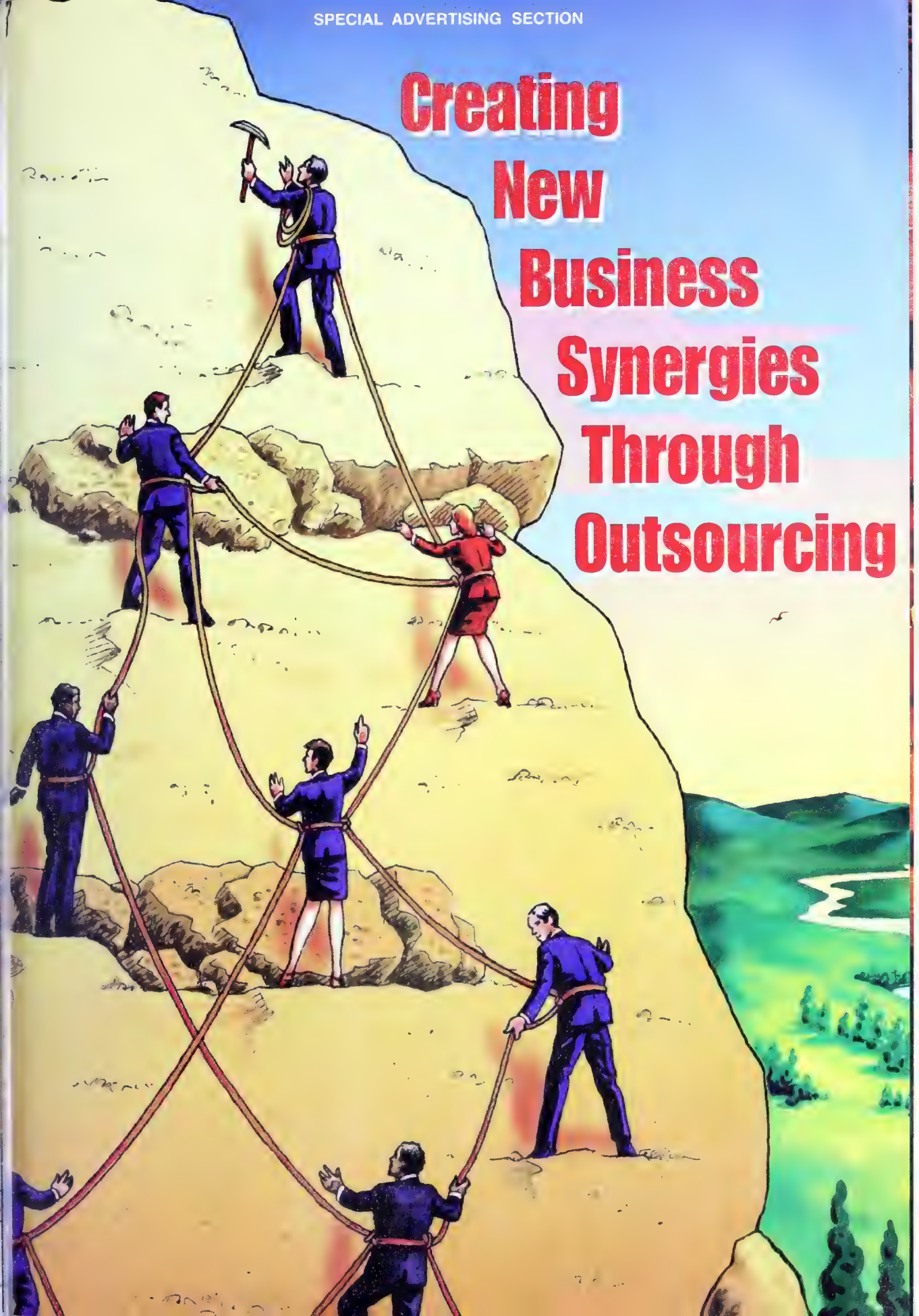
BY JOHN A. EBY

Byrne, who covers management issues for *BUSINESS WEEK*, is working on a book on former Sunbeam CEO J. Dunlap.

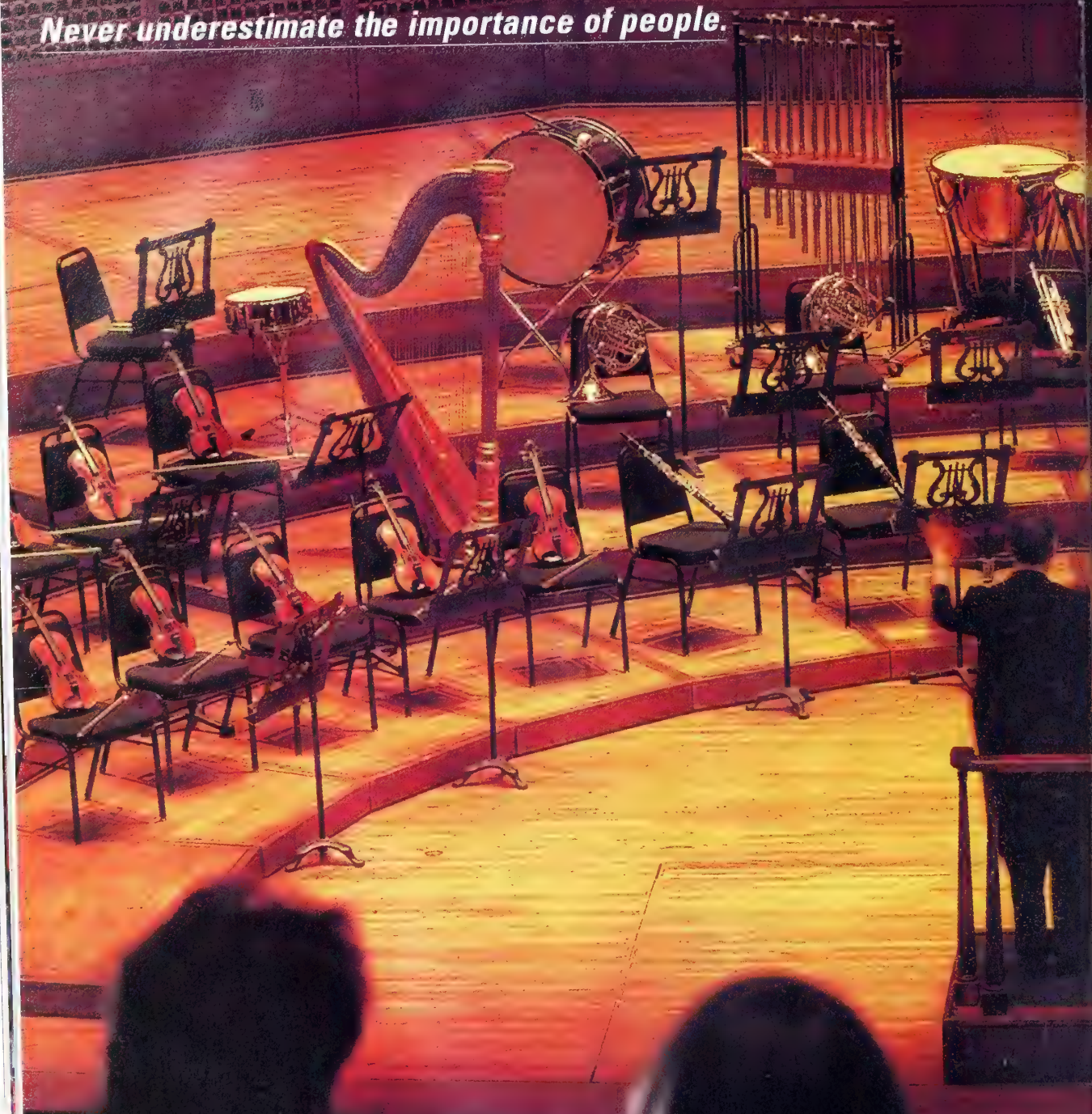
**At Any
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*Jack Welch,
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Thomas F.
O'Boyle

GE'S CHIEF DOESN'T DESERVE THE UNFLATTERING PORTRAIT THAT O'BOYLE PAINTS

Creating New Business Synergies Through Outsourcing



Never underestimate the importance of people.





A friendly reminder from the people who can get the best out of yours. **Hewitt**
Improving Business Results Through People

These are exciting, innovative times for the constantly changing world of business outsourcing. From shared development of technologies and products to new forms of mutually beneficial relationships, outsourcing is creating and enabling new business synergies between companies. In fact, outsourcing has emerged as a primary tool for businesses moving from vertically integrated "islands" to a model based on interrelation and shared services.

This change is evolutionary, as the traditional outsourcing emphasis on tactical benefits like cost reduction fall away and are replaced by benefits like productivity, flexibility, speed and innovation in developing business applications, and access to new technologies and skills. However, the change is also revolutionary in its impact on both outsourcing buyers and suppliers.

Trends like partnering, shared vision and win/win strategies, as well as new leadership and management, are expanding opportunities for more profits, improved efficiency and strategic value through outsourcing. They are also producing a greater need for relationship management, increased communication and hands-on management.

The Emerging Chief Resource Officer

The Outsourcing Institute's index of outsourcing activity indicates that by the year 2001, \$319 billion in corporate resources will lie outside of corporate boundaries. This represents a staggering amount of services, contracts, relationships and overall risks and rewards.

Companies rightfully need to take a look at who, within the organization, has the skills, characteristics and business savvy necessary to operate at that level of authority. And, after careful consideration, they are finding it takes a new breed of outsourcing manager, whose responsibilities are strategic and broad-based. This has resulted in the advent of the chief resource officer (CRO).

The CRO, when empowered as the focal point of all outsourcing strategy, implementation and relationship management, can ensure that all outsourcing relationships live up to expectations. The potential, where given the mandate,

is that CROs will play a pivotal role in organizational transformation, competitiveness and globalization and, ultimately, they will increase shareholder value for their enterprise.

Outsourcing Changes Business Relationships

The keynote for outsourcing is change. This change is occurring at all levels—in departments, business units, companies, industries and the business world at large. And as change continues, outsourcing grows as an essential business tool to help bring it about. The more the tool is used, the more impact it has within an organization.

The nature of the outsourcing industry is also changing. Shared vision and mutual objectives between outsourcer and client are essential to the success of any alliance. This means both partners contribute to a process of mutual disclosure and consensual agreements, and continue to evolve a working relationship based on common goals.

"A critical measure of success in outsourcing is the ability of the client and provider to discuss and create a shared vision."

Frank J. Casale
The Outsourcing Institute

One change in outsourcing is that the suppliers of outsourcing services themselves are beginning to outsource non-core functions and form alliances with other providers to offer end-to-end services. In this way, a chain, or matrix, of suppliers and producers is forming on a global basis. For example, Web solutions firms outsource their network operations. Facilities management companies outsource accounting and payroll via an intranet to that original Web solutions provider, who has arranged to hook into the accounting outsourcing providers' services, and so on until the lines are blurred between one company and another.

"Partnering has gone from something that was hardly ever done five or six years ago, to something that virtually every service provider is looking to do these days," says Frank J. Casale, executive director of The Outsourcing Institute. "From the suppliers' standpoint, as both complexity and competition increase, being all things to all people is less and less of a viable alternative."

The commitment to alliance has extended to business partnerships among vendors, customers and industries. The complexity of service offerings, especially in technology arenas, has spurred suppliers to work together to form consortia and joint ventures. These affiliation acquisitions and partnerships address the spectrum of needs from the consulting side, to decision-making on through traditional outsourcing and business process outsourcing. In this multivendor environment, companies are working together to provide seamless services to buyers and to keep their own competitive edge.

New Directions in Outsourcing

The course set by the transformation created by synergistic outsourcing is building a whole new way of doing business through partnership alliances and strategic relationships. New associations between companies and higher-level deals, are hurling outsourcing into a new phase, categorized by dramatic and hard-hitting trends. Some of these include:

- More complex and higher-level deals

As it grows more and more difficult



Frank J. Casale, The Outsourcing Institute

one company to do it all, many are actively looking and finding partners to enable strategic development and competitive initiatives. This means outsourcing decisions are made higher in the organization and have long lasting results.

- *More long-term relationships.* As outsourcing shifts from cost-control solutions to improved utilization of assets and development of strategic services, relationships grow more long-term. This demands attention to corporate culture, leadership, and shared goals and vision.

- *Win/win approaches between supplier and client.* The move from viewing outside relationships as a buyer-and-supplier scenario to a more equal, win-win model, requires a shift in perception and opens up a set of underlying issues. Open communication is vital, as companies identify and discuss what is to be accomplished, agree on mutually beneficial terms, and select partners who can work together.

- *Relationships that are more like alliances than partnerships.* "Partnership" is more than just a catchword designed to mask a less than equal relationship. True partnership requires a balancing act between participants; it brings in the idea of shared risks and rewards and mutual strategy. For those companies using outsourcing strategically—a number of which are discussed in this section—the focus has shifted from tactical details to whether the relationship is comfortable, the companies' cultures are a good fit, and there is mutual understanding of the business needs of all parties.

Leadership Is Key to Success

Outsourcing is ultimately changing the way business is transacted, functions are managed, and management roles and responsibilities are assigned. It is enabling companies to shift from vertically integrated islands, to complex matrixes of interrelationship. Organizing and managing this web of suppliers is one of the most special challenges companies face today.

"A critical measure of success in outsourcing is the ability of the client and provider to discuss and create a shared vision," says Casale. From that foundation, the success of outsourcing lies in the hands of the people managing the relationship. Cooperation, flexibility and the pursuit of excellence will give all companies involved outsourcing the opportunity to achieve their goals and move forward with success into the next century," he concludes.

About The Outsourcing Institute

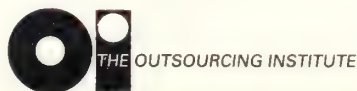
The Outsourcing Institute is the premier source of independent information for buyers, sellers and observers of outsourcing and related markets. The New York City-based professional association and global executive network serves a vital role in the changing world of outsourcing. It meets the growing need for objective and timely information, experience and expertise on the strategic use of outside resources.

The Outsourcing Institute's network, including a distinguished Board of Advisors and a team of senior professionals, consultants and legal experts, totals more than 16,000 individuals. It provides a repository of information, experience and expertise on a complete range of outsourcing issues.

Founder and executive director Frank Casale has successfully counseled hundreds of organizations on the use of outsourcing as both a tactical and a growing strategic measurement tool. He is the creator of such leading-edge concepts as the Second Wave of Outsourcing and the Emerging Role of the Chief Resource Officer (CRO).

Through a wide range of forums, research and information services, OI assists its membership in leveraging internal and external resources, providing access into the growing and changing world of service providers and outsourcing channels.

For further information on The Outsourcing Institute call 800-421-6767 (516-942-3508 outside the U.S.) or visit www.outsourcing.com.



PwC Centers Its Excellence on British Petroleum

BP Oil Europe knew it was embarking in a new strategic direction. The joint venture between British Petroleum and Mobil Oil was formed to achieve efficiencies, cost-savings and add strategic value in a highly competitive market. In pursuit of those goals, BP Oil outsourced its transactional accounting processing to PricewaterhouseCoopers in December 1996, becoming the first client of PwC's new Centre of Excellence in Rotterdam, the Netherlands.

"We felt PricewaterhouseCoopers could generate bigger savings for us, and more quickly, than any other alternative," says Tony Street of BP Oil Europe. "Because it was a new business activity for PwC, the incentive to excel would be a very powerful one," he adds.

But the Business Process Outsourcing team faced some major challenges. "An agreement of this magnitude takes a lot of hard work on everyone's part to be successful," says Richard Smith, a PwC partner and head of the European Operations of PwC's global Business Process Outsourcing practice. He points out that Europe is a very complicated environment, with its many different countries, languages, business practices, regulatory systems and social customs.

Therefore, it was no easy feat to phase in the central service delivery of the outsourced processes—accounts payable and receivable, banking, payroll and financial accounting—for Austria, Belgium, the Netherlands, Germany and Switzerland.

"The biggest challenge was knowledge transfer," says Street. "PwC recruited people locally. They had the necessary language skills, varying degrees of financial background, but no knowledge of the oil industry. They were introduced to each country to learn our processes and build relationships with the people to whom they would soon be delivering the services," he explains. There were some important lessons learned in that first phase, which included Austria and the Benelux countries. The time required to train new people in the



Tony Street, Commercial and Relationship Manager, BP Oil Europe (left),
Richard Smith, Partner/Head of Business Process Outsourcing, Europe, PricewaterhouseCoopers

processes, and particularly in dealing with exceptions to standard transactions, was underestimated. Service quality suffered initially, and this put a strain on relationships. But PwC learned its lessons quickly, and, combined with a greater hands-on involvement from BP management, the Swiss and German transitions were successful.

BP Oil recognized that outsourcing to PwC, as a first customer in an immature market, could be risky. "At the outset, we recognized this was a high-risk strategy," says Street. "We felt an outsourcer could do better than we could do in-house. It would be their core business and, therefore, they would have a much greater focus on back office processes. Then we could focus on our core business—oil manufacturing and marketing."

After working through the first phase, "we became committed to

the relationship and prepared to work for it," Street adds. As a result, by the end of this year, PwC will deliver the business case at the heart of the contract. That business case is based on costs and data such as work drivers and in-house productivity.

After a lot of turmoil and change, Street says BP Oil has 90 percent satisfaction on day-to-day service deliverables. Integrating the European countries of BP Oil into a single shared-services organization through PwC expertise has been an adventure with a happy ending. "We have complete transparency across countries and can start focusing attention on gaining even more value," he says.

So what's next? As PwC continues to apply its core expertise on BP Oil's financial and transactional services and to streamline operations and improve operating performance,

it will also look for breakthrough projects. "We will introduce global best practices, leading-edge technologies, and continuous improvements to drive costs down, provide better information and help build shareholder value," Smith says.

"We felt PwC could do it better in-house. It would be their core business and, therefore, they would have a much greater focus on back office processes."

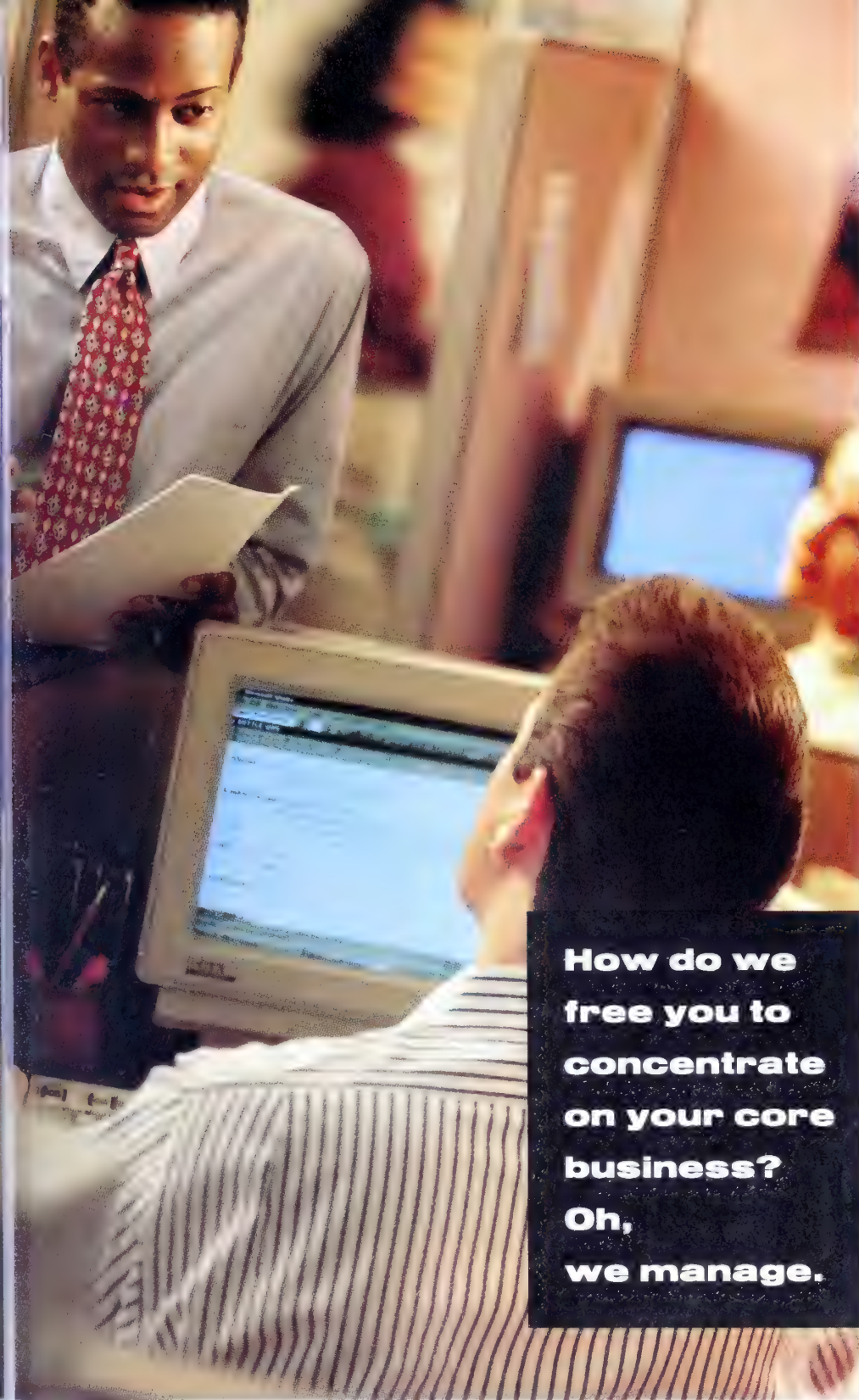
Tony Street
BP Oil Europe

Hewitt Manages Benefits, Pensions and Change for GTE

Partnership, trust and change are driving the success of GTE Corporation's outsourcing collaboration with Hewitt Associates LLC. The results of those forces are putting best practices, technology innovation and core competencies to work on GTE shareholder value.

GTE first outsourced the administration of standard employee benefit offerings to Hewitt in January 1992. Six years later Hewitt is considered GTE's partner, together boosting the telecommunications services firm's bottom line through outsourcing an human resource management.

"If you have a satisfied, informed employee base, the result is a satisfied and loyal customer, and that is what this game is all about—to attract and retain customers for GTE," says J. Randall MacDonald, executive vice president of HR and administration for GTE.



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Over the years, Hewitt has helped consolidate a mix of hundreds of pension and benefit plans into a comprehensive, consistent offering. "We standardized our benefit offerings and eligibility requirements, and the beauty of it was it made it easy for GTE to move people across business units," says Jerry Giambalvo, director of employee benefit services for GTE.

In fact, consistency is a major boon of outsourcing for GTE. "We want the employee to get the right answer the first time," says Tom Hughey, principal at Hewitt and managing consultant for the GTE relationship. The benefits center was formed with that in mind. "We wanted to have the right number of people to answer phones, and the right kind of computer structure, so we could be assured that employees would get what they need," he adds.

"If you have a satisfied, informed employee base, the result is a satisfied and loyal customer, and that is what this game is all about."

J. Randall MacDonald
GTE

Managing employees during times of change, and with consistency, is also a concern. "Hewitt brings a knowledge base of GTE and other companies' best practices to apply to our company," says MacDonald. "As a team, we are consistently raising the bar, so that as we acquire and divest companies we handle employees in a way that is responsive and of high quality."

The nature of human resource management has also changed over the course of the relationship, moving from administrative in nature, to a proactive, integral part of business. In outsourcing the administrative burden to Hewitt, HR at GTE can do its job of attracting and motivating the workforce, MacDonald adds.

The results of the partnership are quite remarkable. They include saving time and money, and achieving greater satisfaction for GTE employees. For instance, when the outsourcing started, GTE had in excess of 400 people delivering benefits, at a cost of \$14 million. Says MacDonald: "Today we deliver those benefits, with the assistance of Hewitt, at one-quarter the staff and one-third to one-half the cost that it was in 1992."

But, more importantly, customer satisfaction is up. MacDonald says that the late 1980s saw erosion of benefits satisfaction in design and administration. In today's employee surveys, benefits satisfaction is constantly rated the highest.

Best practices, partnership, trust and technologies are the ingredients that make up the GTE/Hewitt relationship. But the sum of the parts is always much more than the whole. "In totality, we enable GTE to provide support to its own employees in a way that makes them feel better about the job they are doing," says Hughey. "As a result, GTE employees are free to concentrate on GTE business."

Moving forward, Hewitt is in the process of expanding the technology of GTE's benefits center from voice response to an Internet-based, self-service application. The Internet enrollment site will give employees more flexibility, self-sufficiency, greater accuracy and expanded access to information. "It continues the trend in HR toward less administration and more design and motivation," says MacDonald.

Wang Global Supports PHCS Through Change

A true business partnership emerges through turbulent, rapid change. This is the theme that powered the relationship between Private Healthcare Systems (PHCS) and Wang Global Services.

The concern, back in 1997, was how to deliver desktop support, LAN/server administration, and help desk support at PHCS. As a leading provider of managed care services, PHCS was managing rapid growth

and, at the same time, preparing to implement a new and reengineered client/server-computing environment, explains Donald Hewey, director of support services at PHCS in Waltham, Massachusetts.

"We wanted to focus on our business, and find experts to help us with the rest."

Donald Hewey
PHCS

"We were shooting from the hip," Hewey says. "We couldn't do justice to the reengineering of our systems, workflow and workplace and continue to handle desktop, LAN/server administration and help desk services—critical components in our business delivery infrastructure. We wanted to grow these support functions in a way we weren't staffed or experienced enough to do." PHCS wanted to devote its attention to its core competency—maintaining, servicing and marketing its provider network and medical management services. "We wanted to focus on our business, and find experts to help us with the rest," Hewey adds.

In May 1997, the company outsourced these three services to Wang Global. At the same time, PHCS began implementation of their own reengineering initiatives. Not surprisingly, there were some bumps in the road. Working from the principle that communication and partnership in outsourcing are essential, the companies then brought in two managers to develop a comprehensive working relationship—Hewey for PHCS and Susan Salois, program manager at Wang Global, who is on site at PHCS.

Salois set to work reorganizing the management of PHCS's desktop support program. "We do a lot of work measuring the services and strengthening the partnership," says Salois, "and a 'customer first' approach is integral to all we do." For example, the two companies have implemented a weekly report card to measure how Wang Global is doing against trouble

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tickets and requests from PHCS. "The response statistics have been in the above-average range," she says.

Hewey says the trouble-ticket method has vastly improved support services and provides a concrete foundation for communication and partnership between Wang and PHCS. Now there are measurable goals for problem resolution. The firms have agreed to resolve 80 percent of problems in one business day—in eight hours. For the remaining 20 percent, there needs to be 90 percent resolution within a week and 85 percent of problems resolved on the first visit.

Given the trust and communication that has evolved between the two firms, Wang Global has begun moving forward with other support areas for PHCS. "First, Wang Global took a physical asset inventory to serve as a basis for billing," Salois explains. As a result of those efforts, PHCS's physical asset inventory has tightened up—so much so that Wang Global's role has been expanded to handle PHCS's software licensing environment, and it is automating the functions of software distribution in inventory reporting.

"We consider Wang Global a true business partner in a cooperative relationship," says Hewey. "We are managing our costs, and moving forward with synergies in the relationship." By developing strategic partnerships, PHCS is able to focus on its strategic intent of being the nation's preeminent health care network management company, while moving forward with confidence in Wang Global's superior delivery of desktop support, LAN/server administration and help desk support services.

Sodexo Marriott Maintains Trust at Spring Hill College

Outsourcing to Sodexo Marriott doesn't just secure Spring Hill College excellent food and a well-groomed 300-acre golf course. The 169-year-old institution, with a history of a mom-and-pop approach to management, gains sophisticated direction and guidance dealing with all issues of food service, building maintenance, grounds and housekeeping.

So says Father Greg Lucey, president of the Mobile, Alabama-

based Jesuit school. "We have a high level of satisfaction in the competence and sophistication that Sodexo Marriott brings to all those areas," he says.

"There is a lot we wouldn't be able to do on our own, because we don't have access to the same experts and professionals as Sodexo."

Tom Hickey
Spring Hill College

The partnership between the two organizations started in 1979 with food services. "We have made a lot of changes with food over the years. Kept up with, and ahead of, trends in the marketplace," says Alan Kinhead, Sodexo Marriott dining services director at Spring Hill. The service provider operates resident and student

dining, retail food services on campus and at the school's golf course, and handles catering for college-related events on and off campus.

After a while, through listening to customers, it became obvious that the school needed to upgrade its operations management, says Kinhead. With the level of trust that existed between the two organizations, it was easy to look to Sodexo Marriott for more services. In 1996, Sodexo Marriott took over the responsibility for housekeeping and ground maintenance for the campus and the golf course. "There was a need for better systems and communication between the service providers and the college community," Kinhead says.

By outsourcing the grounds care and housekeeping, Spring Hill gained efficiency, consistency, technology and services, says Bill Carter, Sodexo Marriott director of facilities at Spring Hill. A big plus was that Sodexo Marriott acquired Spring Hill's employees. "We took over employee benefits, saving the school money through paying insurance and retirements," says Carter.

Outsourcing to Sodexo Marriott also cuts down on the amount of reporting the college has to do for workers' compensation, says Tom

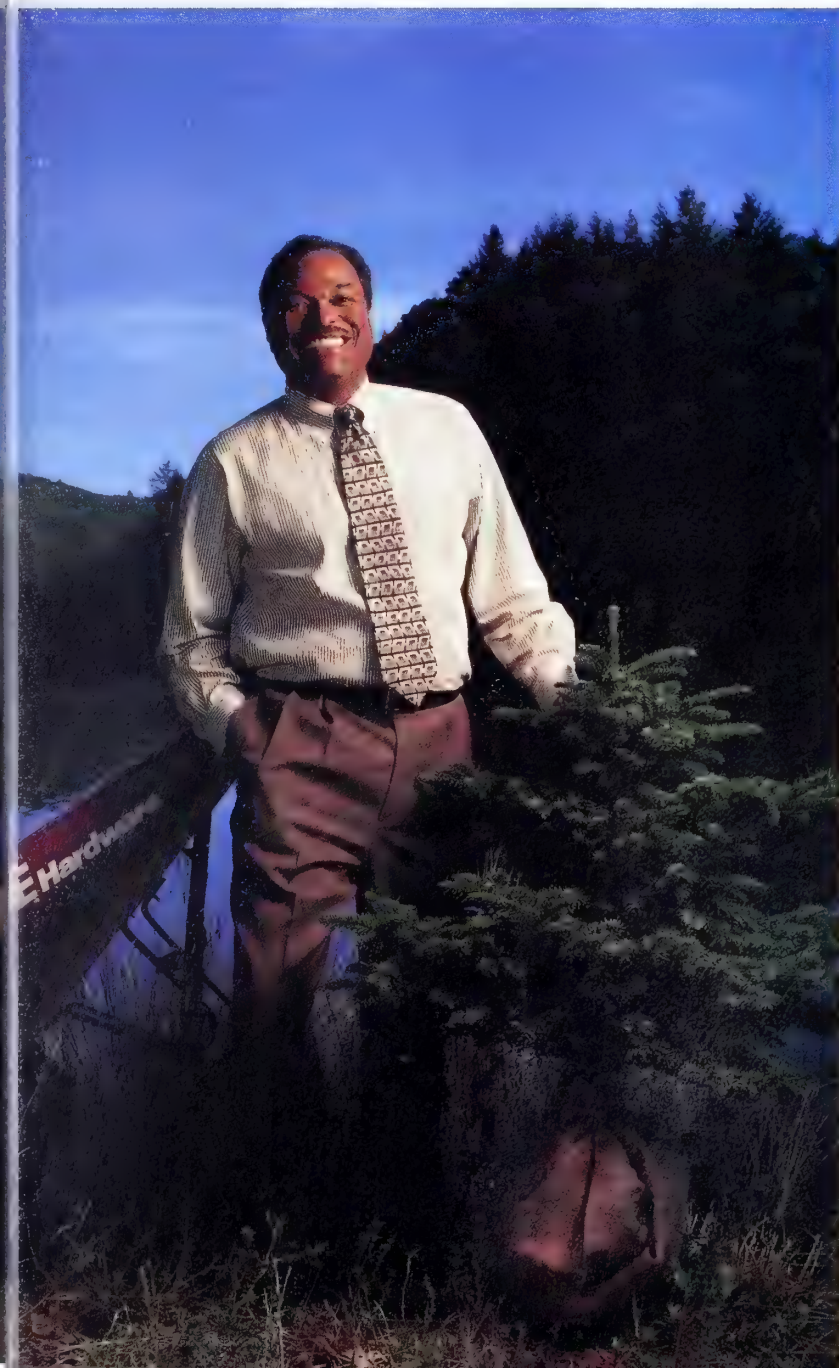


Alan Kinhead, Director, Dining Services, Sodexo Marriott (left), Father Greg Lucey, President, Spring Hill College, Bill Carter, Director of Facilities, Sodexo Marriott



When Ace Hardware needed
innovative environmental
solutions, they chose a name
they could count on:

Tye.



Tye Thompson specializes in transportation solutions at Ryder. He and his team are helping Ace experiment with natural gas to power their fleet. So far, the results have been doubly successful: lower emissions and reduced fuel costs. Which means everyone, even the accountants, can breathe easier.

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Hickey, vice president of finance, administration and information technology at Spring Hill. Sodexho Marriott conducted an extensive examination to eliminate Spring Hill's riskier procedures.

"There is a lot we wouldn't be able to do on our own, because we don't have access to the same experts and professionals as they do," says Hickey. This includes a deferred maintenance study to identify potential problems and address critical life safety issues. "They really have their finger on the pulse of our needs," he says.

Overall, the entire work order system works better, says Father Lucey. "Things used to keep crashing all the time, because there was no way to keep up with work orders," he says. Sodexho Marriott developed a scheduling program that divides grounds maintenance into zones and deals with building maintenance through computerized work orders. "It has shortened our work order completion from one week to two or three days," says Father Lucey.

Efficiency and service, sophisticated and professional management—this is what outsourcing to Sodexho Marriott has achieved for Spring Hill College. But don't forget about the food. "It's excellent food, especially for a college," says Hickey.

Ryder Moves Henredon Around the Globe

William Harris no longer has to wake up at 2:00 a.m. to handle emergency phone calls about flat tires. That's because Harris, who is director of transportation for Henredon Furniture, now outsources all transportation and fleet management to Ryder Transportation Services.

"That is just one less headache," says Harris. He adds that Ryder has taken responsibility for a lot of other potential aches and pains that go along with moving and shipping fine furniture from Charlotte, North Carolina, to major department stores and independent furniture retail stores across the country.

The firm, a subsidiary of Lifestyle Furnishings International Ltd, produces high-end dining, bedroom and living

room furniture. "Ryder's reliability and experience frees up Henredon management to concentrate on the manufacturing and marketing of furniture, as opposed to getting bogged down in the details of maintaining trucks," says Harris.

After four decades of fleet ownership, Henredon considered outsourcing for the first time in the late 1980s. Ryder's nationwide service network and local maintenance reputation led to a lease of 14 tractors and 32 trailers in January 1989, according to Ryder account manager Bill Speagle, who has serviced the account since day one.

"Ryder's reliability and experience frees up Henredon management to concentrate on the manufacturing and marketing of furniture."

William Harris
Henredon Furniture

"From the beginning, Ryder has handled all their maintenance needs by operating Henredon's shop, including preventive maintenance, DOT/EPA regulations, vehicle substitution, washing, permitting, tires, parts, road service, tags and tax reporting," Speagle says. "In recent years we added an on-site dispatching center that handles route coordination throughout all 30 states serviced by Henredon."

Freedom from vehicle maintenance is a huge benefit of outsourcing, says Harris. Another is the ability to take advantage of Ryder's purchasing power. "They get much more reasonable rates, not only for original vehicles but for maintenance items and repair parts, than we ever could," says Harris.

Not to mention that flat tire, again. "If a tire blows in an expensive area of, say, California, we would have to pay whatever they charge. But Ryder

takes care of things like that no matter where and when they happen and does it efficiently and cost-effectively," he adds.

The partnership between the companies is working out for the long term, says Harris. First, Henredon has increased the size of the fleet to 25 tractors and 75 trailers. Second, Henredon can choose to rent more vehicles during peak periods like Thanksgiving and Christmas, on an as-needed basis.

All in all, outsourcing to Ryder helps Henredon meet a number of crucial business and transportation challenges, says Harris. First, furniture keeps getting bigger and heavier. Second, back hauling, where the return trip of a delivery truck is used to move furniture, is commonplace. Third, the growing popularity of Henredon products has created a more complex supply chain.

In addition, customers who are retail dealers are demanding shorter delivery cycles. "With Ryder we can guarantee delivery to our retailers—that is an important Henredon strategy," Harris adds. "That's why the fleet has to be well maintained—to meet the commitment to our dealer on time and damage free."

Harris is confident that the growth and challenges are manageable by relying on and fortifying one of the company's greatest assets—its drivers. "Out of 22 drivers, we have three sons of brothers, as well as two sons of former Henredon drivers," Harris says. "They are a part of the Henredon family, and Ryder understands how important it is to us that their issues, such as safety, training, maintenance and first-class equipment—are taken care of quickly and thoroughly."

For more information on outsourcing, visit www.outsourcing.com

Written and produced by:
The Outsourcing Institute

Writer: Emily Leinfuss
Design: Joseph Frederick
Illustration: Jean Francois Allaux
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AMES C. COOPER & KATHLEEN MADIGAN

THE EARNINGS SLUMP ISN'T GOING AWAY

cope, companies will cut back on hiring and capital spending

U.S. ECONOMY

Let's face it: The earnings performance of Corporate America has been dreadful since late 1997, and the reasons owe as much to homegrown conditions as to a foreign climate. Even though the U.S. economy grew a solid 3.4% during the past year, profits fell 4%, according to BUSINESS WEEK's third-quarter tally (page 50). Now, the economy is set to slow, perhaps sharply. Do you really believe those stock analysts' projections of 5%-to-10% earnings growth for 1999?

WHERE JOB GROWTH HAS HIT THE SKIDS



The latest reports from the labor markets on October job growth and third-quarter productivity offer two powerful reasons to be wary of such rosy profit forecasts. First, job growth is slowing, a key sign that overall economic growth is shifting down a notch (chart). That means less top-line revenue growth.

Second, margins are getting squeezed. Despite good productivity gains, the pace is insufficient to offset the acceleration in labor costs—at least when many companies cannot raise prices. These conditions will not be changing for the better anytime soon. Until they do, profits will continue to suffer.

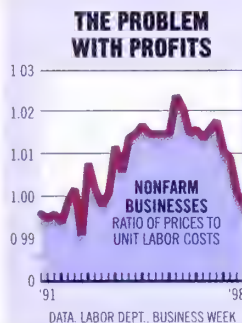
FOR PROFITS

will affect the overall outlook for 1999 in a number of ways. Disappointing earnings could shake the stock market again, with fallout for companies and households. Consider that the Dow Jones industrial average rose from 7500 in late 1997 to 9300 in July, but the profits went nowhere. Now, even though third-quarter profits declined, the major indexes are back within striking distance of their July highs. Some stock market analysts believe those lofty levels are justified (page 50), arguing that equity prices already reflect expectations of weaker profits, along with an earnings rebound in 1999. However, given the pressures from slower economic growth, weak hiring, and higher labor costs, those expectations may be too optimistic.

One sure bet, however, is that sagging profits will cut capital spending. In the third quarter, the gap between corporations' investment outlays and their internally generated funds, mainly cash flow, was the widest since the early 1980s. Companies had been able

to bridge that gap with cheap equity financing and credit. Now, financial conditions are generally tighter, leaving no alternative to shrinking cash flow.

Most important, weak earnings will ultimately dampen consumer spending, as companies cut labor costs. To see why, look at the reason behind shrinking profit margins, illustrated by the steep drop in the ratio of prices to unit labor costs among nonfarm businesses (chart). A year ago, prices in this sector were growing 2% yearly, with unit labor costs rising 1.7%. Now, price growth has slid to only 0.6%, while the pace of unit costs has sped up to 2.6%. This widening gap must reverse before margin erosion can end.



What can ease this tightening vise on margins? Either prices have to grow faster, productivity has to accelerate beyond its already excellent 1.7% pace of the past year, or companies will have to rein in the growth of wages and benefits. You can strike off faster prices and productivity: International pressure on prices will remain heavy, and productivity growth typically slows as output growth slows. That leaves cost-cutting—i.e., layoffs—as the most likely course.

THE OCTOBER EMPLOYMENT REPORT,

mistakenly released a day early, suggests that the pruning has already started. Payrolls increased a less-than-expected 116,000 last month. September payroll gains were revised higher, to 157,000 from 69,000, but that was still below the original expectation. Since July, total payroll gains have averaged 178,000 per month, down from 244,000 in the first half.

Until recently, this slowdown in job growth had been confined to manufacturing, which continues to absorb the brunt of the foreign-trade impacts stemming from the Asian crisis. Adjusted for the strike at General Motors Corp., factory payrolls have declined for seven months in a row, and the October drop of 52,000 was the largest of the year. As a result, industrial production is sure to be weak again in the fourth quarter, after posting no growth in the third quarter.

But in recent months, the payroll slowdown has broadened. In October, the breadth of job gains was the

narrowest in nearly three years. Even among private-sector service companies, which had been so resilient, job growth has cooled a bit. So far in the second half, job gains in nongovernment services have averaged only 170,000 per month, down from 203,000 per month in the first half. Excluding strike activity, that's the slowest four-month pace in 2½ years.

BUSINESSES ARE LIKELY to keep hiring on a leash as long as cost pressures keep building. The Labor Dept. reported that productivity, measured as output per hour worked, rose at a healthy 2.3% annual rate in the third quarter, lifted by the economy's surprisingly strong 3.3% growth in gross domestic product. At the same time, though, compensation increased at a 4% clip, causing unit labor costs to rise by 1.7%.

Looking at the yearly trend through the third quarter, the growth in unit labor costs, now at 2.6%, has picked up. That's primarily because compensation has accelerated steadily, to 4.4%, and productivity's four-quarter pace has fallen back to 1.7%, after briefly rising above 2% earlier this year. History shows that productivity cycles up and down with output growth. So, as the economic slowdown develops, businesses will have few weapons other than workforce reductions in their battle to beef up their bottom lines.

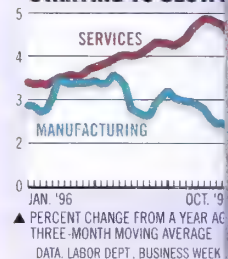
Wage growth does appear to have stopped accelerating, but labor markets will have to loosen substan-

tially before wages slow to the point where margins start to recover. Average hourly earnings of product workers barely rose in October, and the yearly pace slowed not only in manufacturing but among service-producing industries (chart). Still, pay is growing close to 4%, and adjusting for inflation, real wages are out of line with productivity growth.

A slowing in service-sector pay is the key, since service businesses employ 80% of all workers. And in recent months, pay gains in services have eased back a bit, as the unemployment rate has ticked up. Joblessness, which held steady at 4.6% in October, has gradually drifted up from its 28-year low of 4.3% in April. And given the recent spate of layoff announcements, as companies try to slash costs, the rate is sure to edge higher in the months ahead.

However, the return to healthier profits will be an uphill battle for many corporations. Back when labor was cheap, plentiful, and docile, posting double-digit earnings gains year after year was easy, even in a low-inflation climate. Now, the continued lack of price power amid tight labor markets has Corporate America in a box—and it may take a long time to get out.

IS SERVICE-SECTOR PAY STARTING TO SLOW?



MONETARY POLICY

LOCAL RATE CUTS WILL YIELD GLOBAL BENEFITS

Since Sept. 29, when the U.S. Federal Reserve launched its first of two interest-rate cuts, monetary policy around the world has taken a decidedly easier stance (table). Even countries that have not cut rates should benefit.

The cuts are not part of a coordinated global strategy. Germany's Bundesbank remains on the sidelines as Europe prepares for the launch of the euro. And the central banks that have moved did so for disparate reasons. The U.S. wants to calm the financial markets. Britain is trying to stave off recession. Policymakers in Ireland, Portugal, and Spain are easing in order to converge their rates with

those of other euro-zone banks.

The lack of inflation worries gives central banks the room to cut. And cheaper borrowing costs will help the global outlook because lower rates should lift overall economic growth and lessen pressure on some emerging nations to devalue their currencies. In addition, with yields in the industrial nations falling, investors seeking higher returns may reenter emerging markets sooner than if rates had held steady. An influx of foreign funds will help to stabilize the currencies and markets of Asia and Latin America.

Clearly, many emerging nations still need to overhaul their finan-

cial and banking systems. But steadier financial flows will allow the central banks in those countries to cut their own sky-high interest rates. Already, Colombia has cut reserve requirements to free up cash for Christmas gift-giving. And Malaysia has trimmed rates to encourage bank lending.

Speaking in Philadelphia on Nov. 6, International Monetary Fund Managing Director Michel Camdessus said that the recent rate cuts help to reduce the risk of a global recession, adding that these "policy steps have improved prospects for sustaining growth. The IMF is forecasting world output to grow 2.5% in 1999, after a 2% gain this year. One reason for the small pickup is that the IMF sees some hints that Asia is finally bottoming out. Lower rates simply help Asia's prospects.

WHO'S TRIMMING INTEREST RATES

	CURRENT POLICY RATE	POINT CHANGE SINCE 9/29
UNITED STATES	5.00%	-0.50%
CANADA	5.50	-0.50
BRITAIN	6.75	-0.75
IRELAND	3.69	-2.50
PORTUGAL	3.75	-0.75
SPAIN	3.50	-0.75
THAILAND	6.88	-1.00

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The rally this time includes plenty of smaller stocks. And it's real

The bull is back. Just weeks ago, when despair was great and fear reigned supreme, the beaten-up stock market took off like a rocket, confounding the pundits—who are still scratching their heads. The Dow Jones industrial average has advanced more than 1,000 points in a month, and the awesome gains in small-cap and mid-cap stocks have left many investors breathless. "Is this market for real?" asked Anthony Pearce-Batten, the moderator who kicked off the Legg Mason Value conference for institutional investors on Nov. 10. "Or is this one of the biggest sucker rallies of all time?"

It's for real, all right. Although some economists fear that global financial turmoil could touch off a U.S. recession in 1999, several recent events and economic statistics paint a rosier picture: Third-quarter growth in the gross domestic product was higher than expected, world leaders are proposing solutions to the global economic turmoil, inflation remains at bay in the U.S., and the midterm congressional elections suggest that moderation may be in vogue in Washington—and a disruptive impeachment crusade may be passé.

STAYING POWER. True, corporate earnings were down 4% in the third quarter (page 172), but that was less than some investors feared—and many expect a pickup in 1999. "We've come pretty far pretty quickly," says James R. Margard, co-manager of Rainier Core Equity Fund. "But the market seems to be broadening out to the secondary stocks, which is important, and there still seems to be a lot of demand."

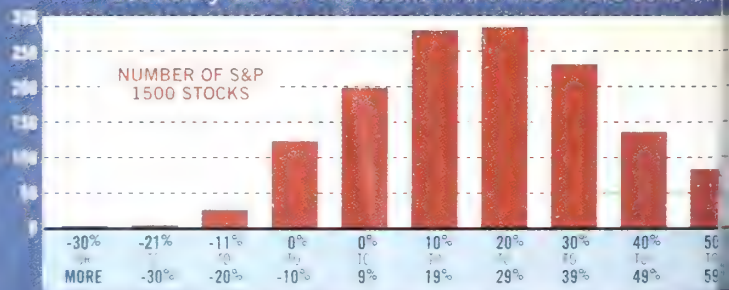
That breadth is what distinguishes this autumn rally from the one last spring and early summer. And that's what may give this rally more staying power. Back then, the market rose higher and higher on the backs of fewer and fewer big multinationals—the "New Nifty 50." At the market's peak in July, the Standard & Poor's



HE'S BACK

A Broad-Based Bull Run

Since the October low, the S&P 1500 Supercomposite is up 1... But nearly 60% of the stocks in the index have done bet...



BUSINESS WEEK / NOVEMBER 23, 1998 51

that. Although profits were down in the third quarter, they weren't so bad considering the global financial shock, the impact of the General Motors Corp. strike, and deflationary pressures on pricing. And market leaders such as IBM and Intel have reported results that exceeded investor expectations.

Stock investors typically look 6 to 12 months ahead, and by that point, profits may well have improved. If productivity increases at the current rate, companies will be able to absorb higher labor costs better. Some Asian economies are bottoming, too, and may even help exports revive. Finally, this year's weaker profits will make year-

over-year comparisons in 1999 look good. Indeed, some think fourth quarter earnings will even show a gain over 1997's weak final quarter.

No question about it: Equities are no longer the screaming buy they were just a month ago. "Now, it's a stock picker's market," says Margard. Among the stocks he says are well off their lows but still attractive are tiremaker B.F. Goodrich; Suiza Foods, which sells dairy products; and U.S. Filter, a maker of water-treatment systems. Miller and Posner are fans of WPP Group PLC, the British ad agency that owns Ogilvy & Mather and J. Walter Thompson Co.

There's still the nagging problem of

long-term rates, which have climbed along with stock prices. High long-term rates can limit companies' ability to finance new capital investment. For Arnold C. Schneider III of Schneider Capital Management says he can live with it. With most central bankers cutting short-term rates, it's natural for bond rates to rise. The cuts, Schneider, amount to "a pro-growth policy, and it's good for stocks." The danger would come if rates spiked upward from these levels—but he doesn't think that's about to happen. "Not with inflation this low." For now, let the continue.

By Jeffrey M. Laderman in New York

WHY THEY'RE NUTS ABOUT THE NET

You can't blame investors in Internet stocks for whooping it up. Once again, the euphoria over such Net darlings as Amazon.com, Yahoo!, and Excite is getting downright surreal. In the first 10 days of November, Internet stocks shot up 11.6%, according to the Goldman Sachs Internet stock index. That's more than double the 4.5% increase of the technology sector in general and seven times the performance of the Standard & Poor's 500-stock index over the same period, which is up 1.5%.

What gives? Can Web auctioneer eBay Inc., with \$12.9 million in third-quarter revenue, really be worth nearly \$5 billion—about 773 times expected 1999 earnings? And Yahoo! Inc., trading at 270 times forecast earnings—is it really worth three times the New York Times Co.?

Bullish analysts certainly think so. They cite new studies that point to a huge rise in online business. Jupiter Communications, for example, predicted on Nov. 2 that consumers would spend \$2.3 billion online during the holidays,

up from \$1.1 billion last year. Another report, by Dell Computer Corp. and pollster Louis Harris & Associates Inc., says 43% of the Americans who use computers will be surfing the Web for Christmas gifts. Only

tion's fifth-largest bank is paying the Web portal for the exclusive right to market its financial products and services to Excite's 17 million monthly users. Online music seller K-Tel International Inc. saw its shares nearly

triple on news of deal with Microsoft Corp.

Some analysts do have misgivings about these valuations. Mitchell Bartlett of Dain Rauscher Wessels in Minneapolis has "hold" ratings on

eBay and Amazon now. "Overall, I don't get it," says Bartlett. "These are fabulous companies. But at 100 times sales, it's hard to see any upside." Warns Paul Cook, co-manager of the Munder Net/Net Fund: "Some of these companies are really going to get banged up."

Don't tell that to the daredevil individual investors who are stirring up the market for Net shares, daily trading in and out of issues at a feverish rate. Some 14.5% of the publicly traded shares in Yahoo! change hands daily, compared with less than 1% for Microsoft, General Electric, or Merck. That means load of profit while the good times roll. But should the bubble burst, these investors are likely to run for cover even faster than they ran to buy the stocks.

By Linda Himmelstein, with Robert D. Hof in San Mateo, Calif., and with Geoffrey Smith in Boston

IN THE STRATOSPHERE

Increase since recent low, as of Nov. 11

YAHOO!
+72%

eb
+300%

amazon.com
+139%

DATA: BLOOMBERG FINANCIAL MARKETS

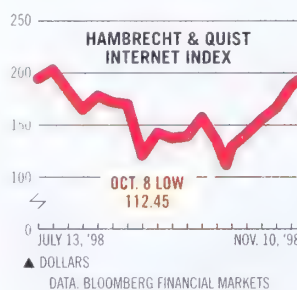
10% of such users did so last year. "[The growth] is not only very real, it's also much bigger than people realize," says David K. Pecaut, senior vice-president at Boston Consulting Group Inc. in charge of the firm's electronic-commerce practice.

JUICY DEALS. The holiday optimism comes on top of other rosy forecasts for the Internet sector. On Nov. 5, Forrester Research Inc. predicted

global E-commerce revenue would reach \$3.2 trillion by 2003, a figure that accounts for almost 5% of all global sales.

Then there are the deals. On Nov. 11, Excite Inc. announced a multiyear pact with Banc One Corp. that could be worth more than \$125 million. The na-

QUICK REBOUND



ET YOU A NICKEL HERE'S A RATE CUT

spite healthier data, enough threats to growth remain

Which way is the wind blowing at the Federal Reserve? The stormy economic forecast that prompted back-to-back cuts in September and October seems to have brightened. Third-quarter gross domestic product, expected to grow only slowly, surged by 3.3%. Consumer spending grew at a solid 3.9%. Productivity was up 2.3%. Even Federal Reserve Chairman Alan Greenspan seemed to lighten up—noting Nov. 5 that he saw “significant signs” of some abnormally large spreads in

at the Nov. 17 or Dec. 22 meetings of the Federal Open Market Committee (FOMC), the inflation hawks among the Fed’s regional bank presidents are expected to go along so that the economy can have a soft landing in 1999. “They have room to move, and a small cut is cheap insurance,” says Mark M. Zandi, chief economist of Regional Financial Associates Inc. in West Chester, Pa.

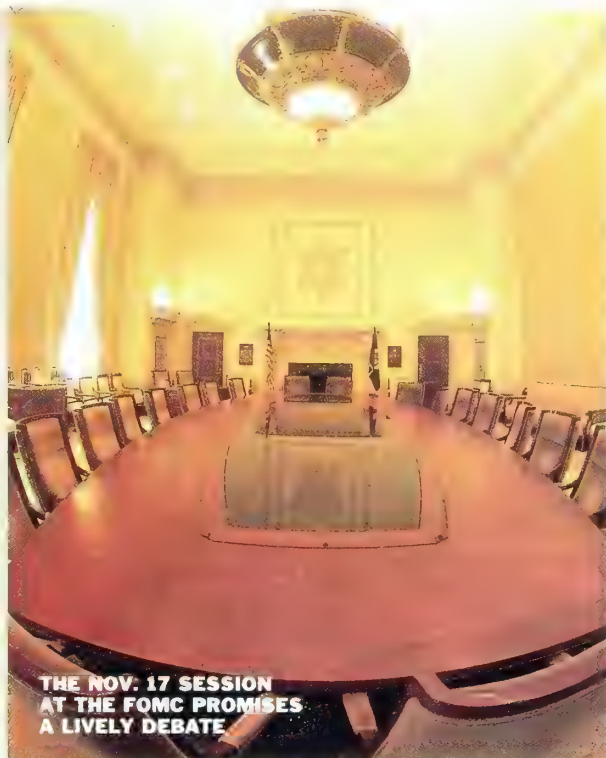
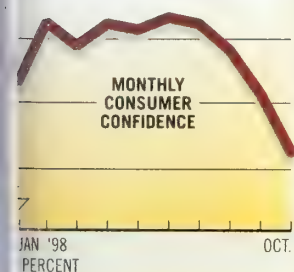
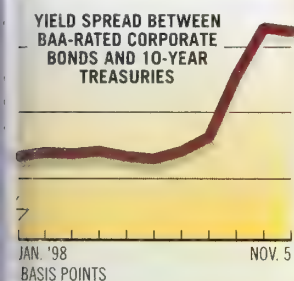
Why do Fed governors fret that the economy, which is showing surprising resilience now, could succumb next year?

trouble abound: Retail prices are falling in France and Germany, raising fears of deflation that would keep Europe from pulling its own weight in the global recovery. Asia remains mired in recession, and Japan’s sputtering efforts to stimulate its economy offer little help. “The world may have stabilized some, but it still doesn’t look good, and may not for a couple of years,” says Rivlin.

VULNERABLE. Finally, schizoid U.S. financial markets have put the central bankers on heightened alert. Fed officials warn that spreads in credit markets are still too wide. They also worry that the recent resurgence in the stock market has carried share prices back into the overvalued range, making the market vulnerable to shocks such as more bad news in emerging economies.

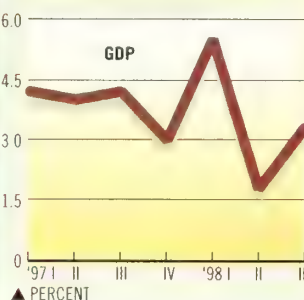
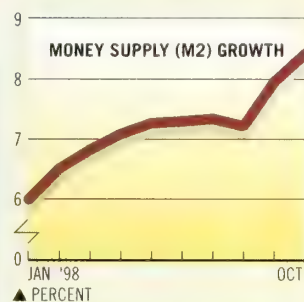
To be sure, not all central bankers buy into the gloomy outlook. A top official at a regional Fed bank dismisses

TWO REASONS WHY THE FED MAY STILL CUT...



THE NOV. 17 SESSION
AT THE FOMC PROMISES
A LIVELY DEBATE

...AND TWO REASONS WHY IT MAY NOT



DATA: REGIONAL FINANCIAL ASSOCIATES INC., BUREAU OF LABOR STATISTICS, BUREAU OF ECONOMIC ANALYSIS

and debt rates were narrowing. Still, don't write off the likelihood that Fed will cut rates by an additional quarter point—bringing the federal funds rate down to 4.75%—before the end of year. Despite the healthy economic and revived stock indexes, Fed officials continue to worry that slowing U.S. exports, continuing distress overseas, unsettled credit markets pose threats to next year's economy. Those factors, they contend, outweigh the risk of overvaluation. “With the economy slowing, I don't think very many people are worried about inflation at the moment,” says Vice-Chair Alice M. Rivlin. And, if Greenspan asks for another cut

They point out that the third-quarter GDP figure included a sharp \$57.2 billion buildup in inventories that will depress future production. During the quarter, earnings were down 4% over last year (see page 172). And while the 4.6% jobless rate is still near a 30-year low, consumer confidence is slipping as layoff announcements rise and job creation falls.

While the Fed is obliged to consider the U.S. economy first, Greenspan is also keeping an uneasy eye on the global economy. Brazil's currency has stopped plummeting while the nation works on economic reforms. That, notes one Fed governor, has instilled an “interesting sense of calm.” But signs of

slowdown warnings as “more evidence of the marvelous self-correcting economy” that doesn't require a Fed boost. And monetarists, like Cleveland Fed President Jerry L. Jordan and St. Louis Fed President William Poole, are alarmed that the money supply's rapid growth will fuel inflation. So, the Nov. 17 FOMC session promises to be lively.

In the end, however, Greenspan is going to get what he wants. And given the current reading of the economy by Fed officials, the preemptive-strike strategy that Greenspan has perfected since 1994 seems to call for action sooner rather than later.

By Mike McNamee in Washington

POLITICS

TAKING CARE OF BUSINESS?

Maybe, but industry isn't counting on a centrist GOP

In the wake of their drubbing at the polls on Nov. 3, Republicans are promising to mute the caustic partisanship that has defined the GOP since it seized control of Capitol Hill in 1994. Suddenly, Representative Robert L. Livingston (R-La.), the all-but-certain new House Speaker, is vowing to heal rifts between the GOP's centrists and archconservatives—and promising new overtures to Democrats, too.

By pledging to rule the boisterous House as a pragmatist, Livingston has cheered business leaders frustrated by years of gridlock. "I'm hopeful there will be less polarity," says Harold W. "Bud" Ingalls, CEO of Atlanta-based chemical company LaRoche Industries Inc. And business bills may fare better if Livingston can, as he promises, prevent social conservatives from jamming the system with debates over controversial riders on bills.

That's what kept Congress from voting on bankruptcy reform this year.

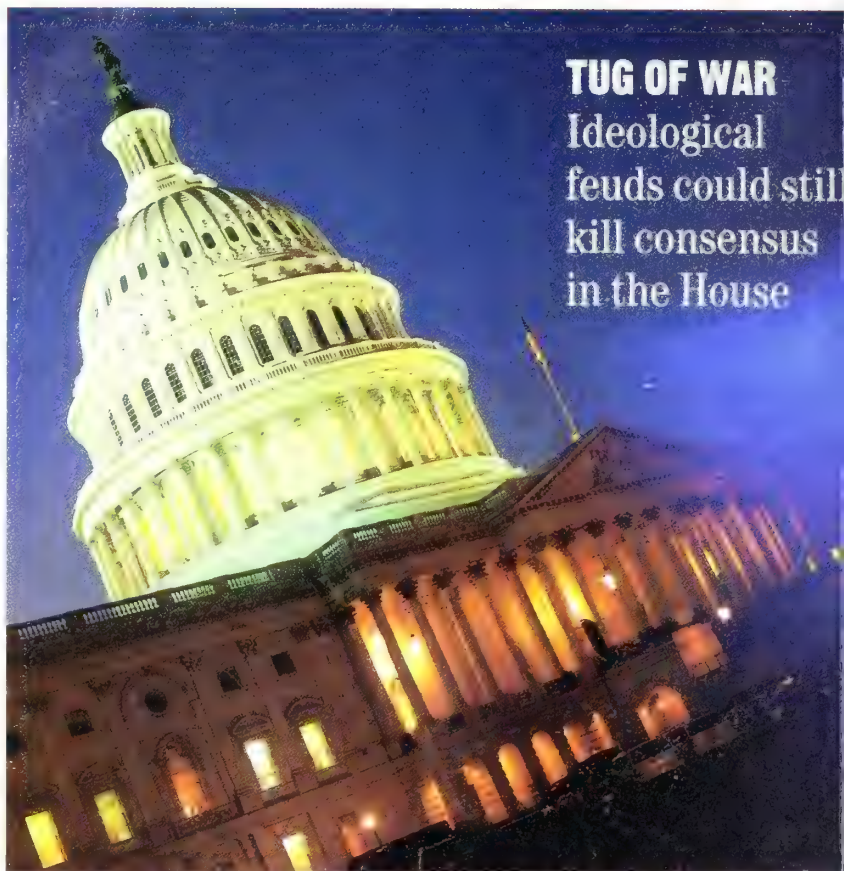
Still, Corporate America isn't banking too heavily on GOP centrism. Executives still expect many

top priorities—fixing Social Security, preventing high-cost health mandates, and Presidential fast-track trade authority—to face tough sledding. "We have a 50% chance to get two out of three of our priorities," says Tenneco CEO Dana Mead, chair of the Business Roundtable. Likely winners: health care and trade.

LEFT JAB? Why not more? For starters, Republicans have only a six-seat edge in the House. That means Livingston could be held hostage by a small group of diehard conservatives that has made the House GOP caucus often seem more like a passel of feuding clans than a cohesive unit. Many on the GOP's extreme

right still believe it's more important to take strong ideological stands than to pass legislation. "I'd rather try and fail than not try," says Representative Tom Coburn (R-Okla.). That doesn't bode well for centrism. "I'm not sure the Republican Party is prepared to come enough to the center," worries Michael H. Bernstein, CEO of Atlanta-based tile maker Crown Crafts Inc.

Bipartisanship may also be elusive. It means a hostile GOP majority has to come to nice with a President it has tried to boot out of office. The Democratic left could also become more vocal because of a strong election showing attributed



TUG OF WAR
Ideological feuds could still kill consensus in the House



'NEWT, WE'RE GONNA MISS YOU'

Newt Gingrich's resignation as Speaker of the House is great news for Democrats, right? Maybe not. Sure, it's a relief to see their nemesis shuffle off stage right. But he leaves a void: The scowling symbol of radical Republicanism, Newt has been a magnet for Democratic support. A mere picture of the

Speaker's mug on a direct-mail piece could bring in a gusher of contributions. The specter of Gingrich backed by a larger GOP caucus also proved massively useful in getting out the Democratic vote. Without Newt, says Claibourne Darden, an independent pollster, "there's no obvious whipping boy"—especially if Republican leaders put on a kinder and gentler face.

For now, Democrats will try to take the entire Republican Party with the same brush they used on Newt. The GOP, warns White House aide Paul E. Begala, is "still the party of extremism and divisiveness." Democrats can, of course, fall back on the issues—education, health care, and Social Security—that produced stunning results on Election Day. But that wouldn't be nearly as much fun.

By Richard S. Dunham
in Washington

1 members and minorities. And fi-
 with 2000 looming, Presidential as-
 ts may seek to stake out differ-
 s rather than seek consensus.

ill, Republicans concede that they
 to pay attention to the Nov. 3 mes-
 : Stop fighting with Democrats and
 o work on legislation. The best op-
 unity may be winning fast-track
 authority because of the new cen-

Democrats. But finding common
 nd on many issues will be tortuous.
 example, the GOP may back a dilut-
 patients' rights" bill that would ex-
 the ability of consumers to appeal
 als of treatment by insurers. But
 blicans balk at what Democrats
 most—the right to sue insurers.

1 education, the GOP will be reluc-
 to abandon school vouchers, a key
 ervative initiative. But vouchers
 t fly with Democrats. So, Republi-
 will probably press for school
 e, while they also push less con-
 sersial initiatives aimed at strength-
 g public schools. Before now, "the
 blican education platform has not
 n into account fixing public educa-
 " says Representative Mike Castle
 el.), a moderate who champions af-
 school programs.

JSM. Overhauling Social Security will
 be Big Enchilada on lawmakers'
 es. Republicans concede that Clin-
 "save Social Security first" slogan is
 accepted wisdom—and the barrier to
 uts they crave. Ways & Means Com-
 ee Chairman Bill Archer (R-Tex.)
 promised to pursue a bipartisan deal,
 only if Clinton floats his plan first.
 chance. Fearful of the kind of maul-
 his health plan got four years ago,
 President is willing to provide only
 eral principles. To get a compromise,
 ton may have to agree to convert a
 l portion of Social Security to private
 stment accounts—something that lib-
 s will oppose vehemently.

Meanwhile, Republicans will try for a
 round of tax cuts. But GOP visions
 10-year, \$1 trillion tax cut are fad-
 as fast as their champion, Newt
 urch. "We have to be realistic," says
 p Ways & Means aide. Still, hard-
 s will howl if GOP leaders don't push
 big cuts. "The 'hold my breath til I
 caucus will probably make Liv-
 ton's life hell," says former Gingrich
 and lobbyist Daniel Meyer.

ut after watching the disarray of
 Gingrich House, Livingston seems
 ing to take the heat if it helps re-
 e order. And if a more disciplined
 Congress emerges, business will
 sider '99 a modest success.

by Amy Borrus, with Richard S.
 ham, Lorraine Woellert, and
 eard Gleckman in Washington, and
 eau reports

COMMENTARY

By Lee Walczak

NOW, YOU'RE NEVER FULLY DRESSED WITHOUT A REPUBLICAN SMILE

Louisiana's Robert L. Livingston is not your natural-born smiler. The head of the House Appropriations Committee is part bean-counter, part hothead who gets his kicks—literally—at karate class. So why is Livingston suddenly popping up on television talk shows, grinning as he tells viewers his Mom told him to stop having tantrums on the House floor?

Like GOP pols everywhere, the man most likely to succeed Newt Gingrich as Speaker of the House has contracted acute smile-itis. Convinced that voters turned against GOP candidates because they came off as Newt-ian nabobs of negativity, Republicans want a makeover. Dour warnings of cultural rot are out. So are vicious public feuds. Conservatism with a smiling face—the formula that Ronald Reagan perfected—is in. This year's role models are the beaming Bush Boys (Texas Governor George W. and Florida's Jeb), who ran highly successful, inclusive campaigns.

Still, it's not clear that smiley Republicanism will cure what ails the party. Many of the GOP's core policies—from curbing abortion to opposing HMO patient protections—do nothing to expand the Republican base. But the party's right-wingers can't abandon explosive social issues for fear of alienating the religious right.

LONE STAR. There is a way out, though—if Republican leaders on the Hill will take it. They can adopt the winning strategies of Republican politicians in the states. While the national GOP focused on bashing Bill Clinton and banning late-term abortions, Republican governors pursued a far more pragmatic—and popular—course.

In Texas, Bush's "compassionate conservatism" made major inroads

with minority voters. While Newt & Co. fought against Clinton's crusade for school funds, Bush made fixing his state's education system one of his top priorities. The governor "started with the concession that we need more money," says his media guru, Karl Rove. "But he talked about local control, higher standards, and more competition to lay out a road map for a better tomorrow. That's a positive vision, not a wedge."

"LOSING HAND." Other governors won favor by coming off as efficiency experts rather than cultural warriors.

Wisconsin's Tommy Thompson reformed the welfare system. Michigan's John Engler overhauled a creaky state tax code. And New Jersey's Christie Whitman slashed that state's bureaucracy to pay for tax cuts. "We can be led by Gingrich and [Senate Majority Leader] Trent Lott with 30% approval ratings," says Republican National Committee member Ron Kaufman, "or by governors with ratings in the 60% range. We've got to choose."

While the GOP mulls that choice, Republicans in Congress are reacting by putting on a happy

face. For some party pros, that's a start. "As you smile, you get into a sunny groove," muses Republican Party theorist James P. Pinkerton. "Ultimately, this will lead us from social issues, and we'll drop a losing hand."

Maybe. However, party leaders will have to do more than that. To regain a political center currently occupied by Bill Clinton, they must revamp both their message and their fire-and-brimstone platform. They won't find much to chuckle about while they're doing it.

Walczak is BUSINESS WEEK's Washington bureau chief.



WHAT REAGAN KNEW
 Having an upbeat
 attitude helps, but
 what the GOP
 really needs is an
 inclusive platform



THE GLOBAL ECONOMY

THE TRADE TALK GETS UGLY

Can Clinton resist fighting fire with fire?

When leaders of the 18-nation Asia-Pacific Economic Cooperation forum meet on Nov. 17 in Kuala Lumpur, they'll have more than the region's financial woes on their agenda. Delegates are increasingly worried that the world may be pulling back from free trade just when the floundering economies of Asia most need access to open markets. Such a shift would also threaten the still-healthy economies of North America and Europe, leading to the first global trade contraction since the 1930's.

Big trade confabs always pulse with warnings of trade wars, partly as a spur to negotiators. But this time the signs of rising protectionism may be real. In Washington, President Clinton faces pressure from U.S. steelmakers to stem a flood of steel imports. Long-running

transatlantic spats over agricultural imports and trade sanctions are escalating. Meanwhile, China and Japan are backing away from promised reforms.

Pre-summit APEC meetings have left free trade advocates dispirited. And with Malaysian leader Mahathir Mohamad rushing to regulate capital flows, there's a lack of host country support for a trade agreement. "The world fiscal crisis is now metamorphosing into a trade crisis," says David L. Aaron, the Commerce Dept.'s top trade official. "Countries are backtracking," agrees Kim Kihwan, South Korea's economic affairs ambassador.

The biggest threat to open trade is the need for Asian economies to export their way out of a morass of debt. World leaders agree that exporting will help—but where the exports should go is the big question. To curb unemployment in Europe, its leaders have maintained

barriers against the Asian tide. That has diverted a disproportionate share of Asia's exports to the U.S. China's surplus with the U.S. will approach \$60 billion this year, up from \$50 billion in 1997. Europe limited the Chinese surplus to just \$5 billion.

That lopsided situation is provoking transatlantic tensions. "We alone cannot absorb all of Asia's imports," says Commerce Secretary William M. Daley. Meanwhile, an angry Europe accuses the U.S. of using trade sanctions as a foreign-policy wedge that halts European investment in Iran, Libya, and Cuba. "It is time to outlaw such unilateralism," insists Frederic Jenny, a French trade official. As if to prove his point, Washington threatened the European Union on Nov. 10 with 100% tariffs on champagne and cheese in re-

taliation for European quotas on U.S. bananas.

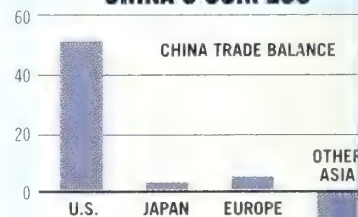
None of this was anticipated a year ago when the APEC summit was planned. Trade ministers from 21 nations were supposed to sign major opening deals in everything from telecommunications to fish to jewelry aimed at generating some \$1.5 trillion in trade. But the trouble in such economies as Korea and the Philippines combined with Japanese foot-dragging may mean any trade opening. Indeed, U.S. negotiators fume that Japan's refusal to lower its 6% tariffs on imported fish is torpedoing the APEC talks."

CRYING GAME. Instead, delegates were worrying about the growing asymmetry in global commerce, with the U.S. becoming the buyer of last resort. Goods have poured into the U.S., and external debt has surged to \$1.3 trillion, 15% of GDP, and could grow to 20% within two years. The U.S. deficit in goods and services is expected to jump from a record \$160 billion this year to \$300 billion in 1999, or 2.8% of gross domestic product. "A striking figure," says Deputy Treasury Secretary Lawrence Summers.

Already, the U.S. steel industry is crying for relief, pointing to a 78% increase in imported steel through August. On Nov. 10, Clinton promised a group of chief executives that he'll make the steel problem at APEC. "We will insist that our key trading partners live by the rules," Clinton vowed. But taking up the cause of U.S. steelmakers will help Clinton make the case for keeping global commerce growing. "I don't think it's healthy to watch our steel industry go under, but we have got to balance that against the benefits to the American consumer" of free trade, wrote Dana G. Mead, chairman and CEO of Tenneco Inc. Clinton's challenge is to beat back the protectionist fires rising everywhere—particularly those at home.

By Paul Magnusson in Washington with Mark L. Clifford in Hong Kong

THE U.S. IS ABSORBING CHINA'S SURPLUS



▲ BILLIONS OF DOLLARS

DATA: COMMERCE DEPT., SENATE BANKING CMTE., CENSUS BUREAU, PEOPLE'S REPUBLIC OF CHINA, HONG KONG



HAPPIER DAYS

Gates and Intel's Andy Grove in 1993, before Microsoft stymied Intel's multimedia software

ternative to Windows. Indeed, at a recent industry conference, Intel gave demonstrations of chips running on five different operating systems—only one of which came from Microsoft.

At the same time, Microsoft is more interested than Intel in consumer devices such as handheld computers and TV set-top boxes. These typically use chips cheaper than those Intel makes, so Microsoft now writes software for such Intel rivals as Hitachi and MIPS. Microsoft also is working closely with Intel's archrival,

Advanced Micro Devices, on 3-D technology for Intel-compatible chips.

Then, there's Java, the Sun Microsystems Inc. programming language. Intel aims to make Java work best on Intel chips. This, of course, threatens Microsoft, which believes Java undermines Window's supremacy. McGeady told the court that Microsoft CEO William H. Gates III pushed Intel in 1995 to scale back its Java efforts. "They wanted it to stop," McGeady said. **"SUICIDE FOR INTEL."** Intel did back off some. But the company has since invested in Java startups and is working with Sun to fine-tune the performance of Java on Intel chips. "It would be suicide for Intel to bet its whole future on fat PCs that run the latest version of Windows," says Jeffrey Tarter, editor of industry newsletter *Soft-letter*.

Insiders say that despite Intel's growing independence from Microsoft now, it was indeed intimidated by the software giant back in 1995. Then, Microsoft was writing versions of Windows NT for many brands of chips, not just Intel's. Since then, those brands have faded in importance, and Intel holds nearly all of the market for PC servers.

While McGeady's testimony underscores real differences between Intel and Microsoft, observers argue it's also a calculated bid to show the feds—who are chasing Intel, too—that the companies don't act as a duopoly. "Intel wants to put distance between itself and Microsoft," argues attorney Gray. The chill that could follow McGeady's damaging testimony might just do the trick.

By Andy Reinhardt in San Mateo, Calif., with Susan Garland in Washington

AL AFFAIRS

IE WINTEL OF IEIR DISCONTENT

view of the duopoly from inside Intel doesn't look so rosy

or 17 years, the relationship between Microsoft Corp. and Intel Corp. has been so symbiotic that we have come to be known simply 'Intel—a contraction of Windows Intel. But on Nov. 9, when Intel President Steven D. McGeady took stand in the U.S. government's antitrust suit against Microsoft, he revealed deep cracks in the relationship.

McGeady's riveting two-day testimony contained enough bombshells to send Microsoft scrambling for cover. The Intel told the court that in August 1995, weeks before the launch of Windows 95, Microsoft threatened not to support future Intel processors unless the maker stopped writing multimedia software that Microsoft saw as competing with its own. The threat, McGeady "was both credible and fairly terrible." Intel, McGeady noted, dropped multimedia software soon after. But he conceded Intel also was late to market.

McGeady's testimony was a power boost to the government, most of whose witnesses have been from Microsoft rivals. "The specific allegations themselves are damaging," says Richard

Gray, a partner with Bergeson, Eliopoulos, Grady & Gray, a Silicon Valley law firm not representing anybody in the case. "And they carry more weight than previous allegations because of who [McGeady] works for."

McGeady revealed on the stand what many in Silicon Valley have long suspected: Changes in the high-tech landscape are straining the Wintel relationship. While the duo still work together closely on the technologies for personal computers, from which they both derive the vast bulk of their revenues, the post-PC future is driving them apart. "The growth opportunities for both companies are in different areas," says Nathan Brookwood, principal at chip analyst Insight 64.

Intel, for instance, is aiming for the high end of the computer market—and weaning itself from reliance on Microsoft. The chipmaker has heavily courted makers of Unix software—the chief rival to Microsoft's Windows NT—to support its next-generation Merced superchip, expected in 2000. And it has invested in a startup that sells the fast-growing Linux operating system, an al-



LAWSUITS

WHEN THE SMOKE CLEARS...

Why Big Tobacco would settle for a \$200 billion states' deal

After months of talks, negotiators were working overtime to complete a proposed \$200 billion deal to settle lawsuits between cigarette makers and 36 states. Their goal: to announce a deal on Friday, the 13th of November.

Could it be Big Tobacco's lucky day? With "the most material threat against the industry" removed, predicts Salomon Smith Barney analyst Martin Feldman, shares of Philip Morris Cos. and RJR Nabisco Holdings Corp. could climb 30% over the next year. Analysts predict a flurry of financial maneuvers to boost tobacco stocks. Philip Morris is expected to restart its \$3 billion-a-year share buy-back, and perhaps spin off its Miller Brewing or Kraft divisions. Wall Street is counting on RJR Nabisco to divest international operations and its 80.5% stake in Nabisco. RJR execs might want to delay the Nabisco spin-off, but a confidant of financier Carl Icahn tells BUSINESS WEEK that Icahn will force RJR's hand in a proxy battle if it stalls.



But the spin-offs could run into other problems. Even if the state suits are settled, there are still more than 850 pending actions by insurers, smokers, and labor unions—many of whom may try to block deals that shift assets to other entities.

And the states' deal will make the cigarette business a lot less attractive. Philip Morris and RJR may need to raise prices by 35¢ a pack to fund their share of payments, hikes that could accelerate the 4% annual decline in consumption.

Meanwhile, new taxes aimed at curbing sales are coming. In California, they're still tallying Proposition 10, a 50¢-a-pack tax that is expected to pass.

IT'S A DEAL?
Ahead lie tough marketing constraints, spin-off obstacles, and hundreds more suits

And there's talk of a general tax as high as \$ per pack. The White House is reluctant to pose new taxes, but insiders say the Administration might consider a levy on cigarettes as part of a

cut package or a tobacco bill.

Finally, if holdouts such as Connecticut Attorney General Richard Blumenthal get their way, the state deal will impose curbs beyond limits to billboard advertising, product placement in movies, use of branded merchandise. Even so, all that, cigarette makers will breathe a sigh of relief.

By Dean Foust in Atlanta and Light in New York

BIOTECH

WHO WILL GROW A LIVER FIRST?

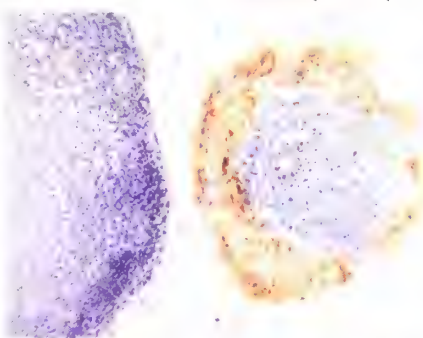
Geron may not be No. 1 in the race to grow human organs

On Nov. 6, scientists announced a major new advance: They had found a way to isolate human cells that can grow and become any part of the body. News stories predicted that so-called embryonic stem cells could one day grow replacement livers or build new muscle for failing hearts. "We now have the possibility of repairing degenerating tissues," says Thomas B. Okarma, research chief at Geron Corp., the biotech firm that funded the research.

But other companies may already have found a quicker route to these marvels. Already, Baltimore-based Osiris Therapeutics Inc. has regenerated bone in animals using another type of stem cell. And in Lincoln, R. I., CytoThera-

peutics Inc. plans to treat Parkinson's disease using a neural stem cell. "We're not talking about something 10 to 20 years away, like Geron," says CEO Richard M. Rose, MD. Says James D. McCament, editor of *Medical Technology Stock Letter*, "CytoTherapeutics is much closer to the clinic and more significant from an investment standpoint."

The key to these swifter therapies lies in the types of stem cells being used. Geron shared the mother of all stem cells—a single cell that theoretically can become any part of the body. Osiris and the StemCells Inc. subsidiary of Cyto-

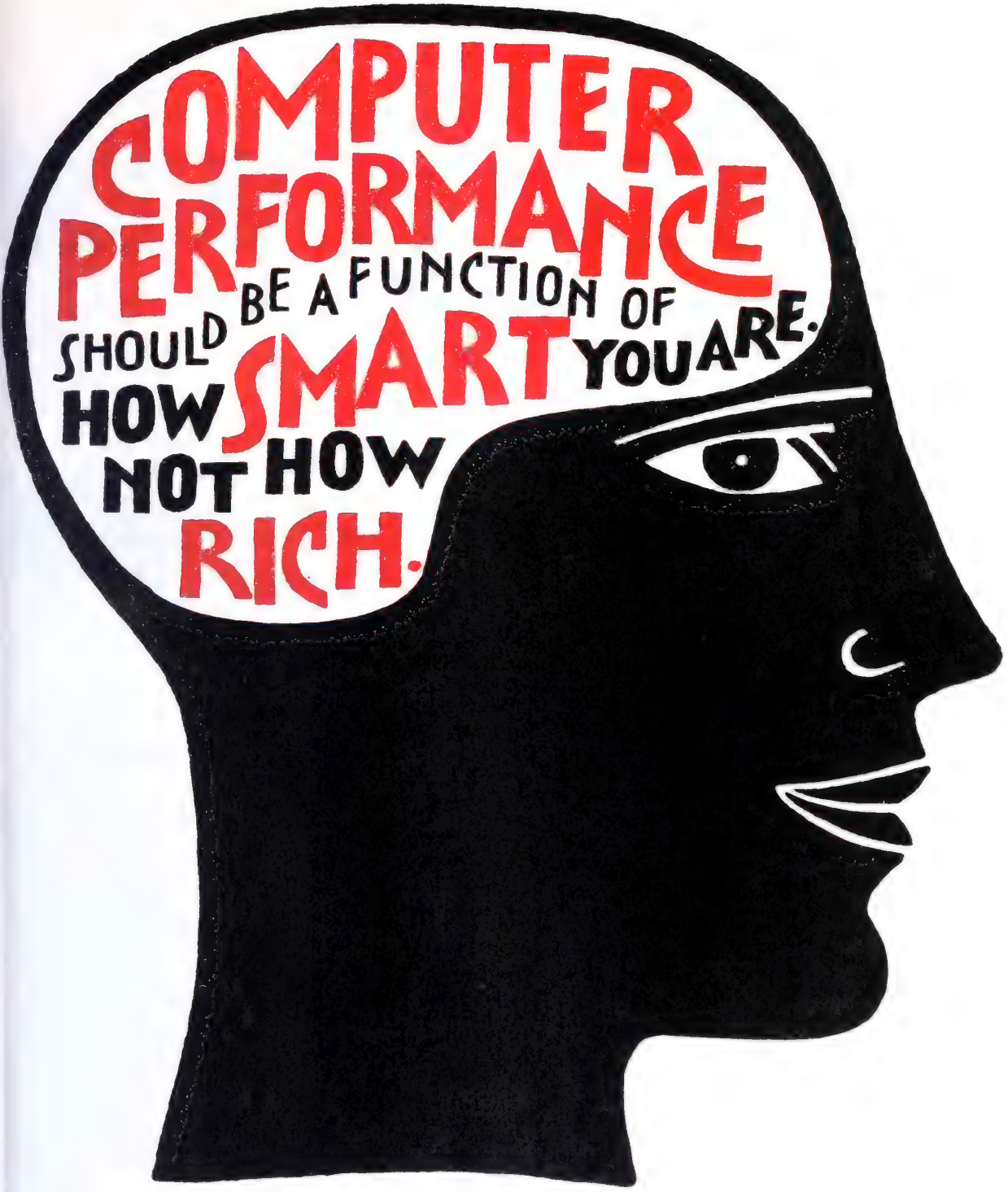


SPECIALIZED CELLS COULD BE THE KEY

Therapeutics are using stem cells already part way down the developmental path. These cells are no longer able to create any organ but are progenitors of specialized body parts like livers or bone. And because these cells are partly specialized, scientists are much closer to actual applications. Indeed, medical researchers at University Hospitals in Cleveland are already using so-called mesenchymal stem cells to try to help women recover from side effects of breast cancer treatment.

Geron has to clear other hurdles. No one has any idea how to direct embryonic stem cells to make, say, a liver. And even if Geron scientists learn to direct embryonic stem cells down different developmental paths, it may not be easy to capitalize on its breakthrough. In the way, they could create the "daughter" stem cells that companies like Osiris and StemCells have already patented. Analysts predict the company will find trouble around the patents. But the embryonic stem cell hoopla could end up as breakthrough science that can't realize its enormous potential.

By Ellen Licking in New York and John Carey in Washington



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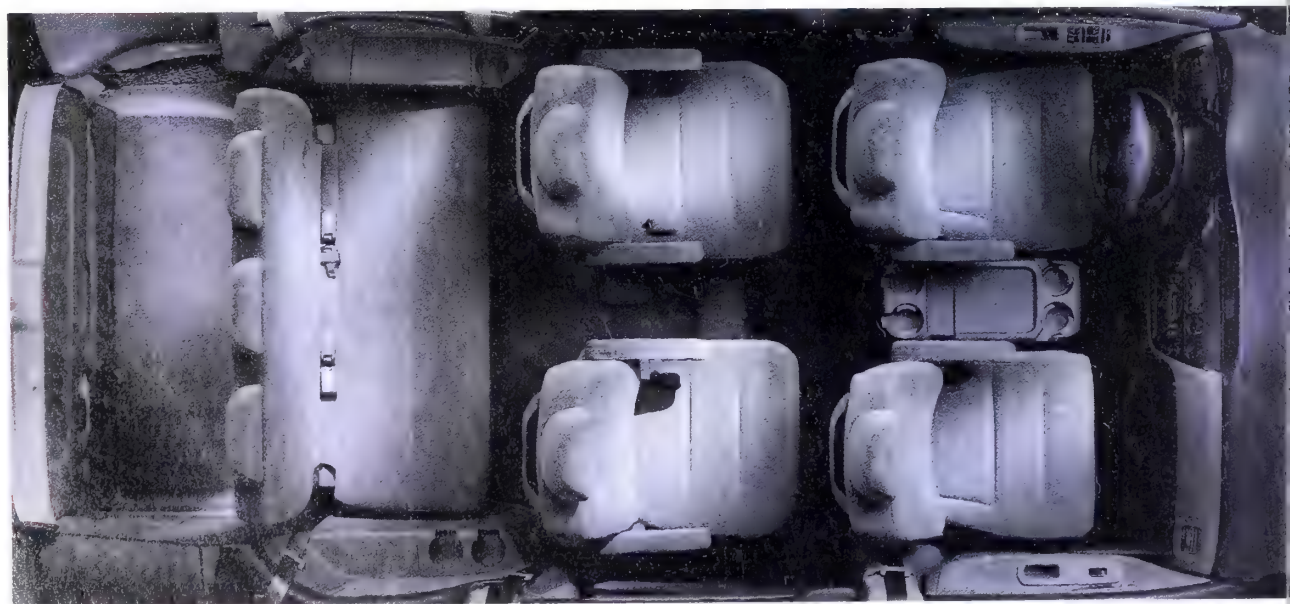
for safety, engineered to minimize noise and has more room than you know what to do with. And this is one place where the furnishings

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COMMENTARY

By Aaron Bernstein

PEG THE MINIMUM WAGE—FOR GOOD

On Nov. 3, Washington State voters made economic history when they passed the first law to adjust the state minimum wage automatically for inflation every year. The law is likely to spur renewed action in Washington, D.C., where Democrats have been trying to index the federal minimum wage to consumer price hikes since the high-inflation 1970s. Senator Edward M. Kennedy (D-Mass.) proposed indexation when the minimum was lifted in 1996, but the proposal was dropped before the law passed. He's sure to try again now that there are more Democrats in the House and Republicans are desperate to appear more moderate.

Indexation makes sense for both economic and political reasons. Recent studies have found that raising the minimum wage means the loss of few, if any, jobs, as long as it isn't too dramatic an increase. And making the adjustment automatic would at last stop the decades of political bickering.

But while indexing the minimum wage would solve many political problems, linking future increases to the wrong peg—inflation—might create some new economic ones. In particular, the supply of low-end jobs might suffer.

Indexing proponents frequently advocate the Consumer Price Index (CPI) as a wage peg because it's the most obvious and convenient benchmark. The government, for example, uses the CPI to calculate annual cost-of-living increases for Social Security payments. Bottom-end workers living on the edge of poverty, proponents argue, need a similar cost-sensitive system.

But there's a good reason not to use inflation as a minimum-wage peg: Lifting up wages of bottom-end workers faster than those of middle-income employees could price some minimum-wage workers out of the market, particularly as the economy slows. In the 1980s and early 1990s,

for example, the hourly wage of middle-income employees lagged behind inflation. If the minimum had risen over this period, it could have hurt the growth of low-skilled jobs. "Even economists who support a higher minimum worry about this," says Jared Bernstein, an economist at the

Productive, employers can afford to pay them more. And the most logical approach would be to tie the legal minimum to the efficiency gains of low-wage industries, such as fast food.

Unfortunately, the productivity peg is a wobbly one. Government figures on industry-level productivity aren't very good, especially in hard-to-measure service jobs where many minimum-wage workers are employed. **LEVEL BEST.** The next best thing, then, is to peg minimum-wage hikes to annual changes in average wages. That way, the fate of low-wage workers would be no worse than of those a few rungs up. If average workers manage to beat inflation, those on the bottom would do so, too. This would also be the least objectionable to employers of minimum-wage workers, since the increases would tend to be smaller (chart).

The most difficult indexing issue is picking the percentage of the average wage at

which the minimum should be set. In other words, one wouldn't want to set a minimum so low that it would forever keep low-end wage earners in poverty. The Washington State referendum dealt with this by first raising the minimum to \$6.50 in 2000 and then indexing it. Backers chose \$6.50 because that's about the annual poverty line for a family of three today. However, it's still below the inflation-adjusted peak of \$6.81 the minimum hit in 1968.

Proponents of an average-wage index suggest starting at 50% to 60% of the private-sector hourly rate. Economics offers little help on picking the right number, since no one has figured out how to tell at what level significant job losses would start to occur. Still, a solution is possible: Pick a compromise level, do the math, and put a stop to the endless battles.

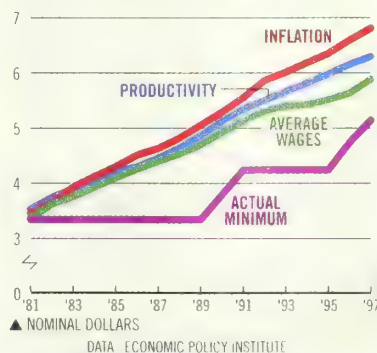


SERVICE IN SEATTLE: A model for the Feds?

Economic Policy Institute, a liberal think tank in Washington, D.C.

The ideal solution would be correlating wage gains to productivity gains. Tying the minimum to annual productivity hikes would cause the fewest economic distortions and would make the most economic sense. After all, if low-wage workers are more pro-

HOW INDEXING THE MINIMUM WAGE MIGHT LOOK



Bernstein covers labor issues for *BUSINESS WEEK* in Washington.

In Business This Week

EDITED BY KELLEY HOLLAND

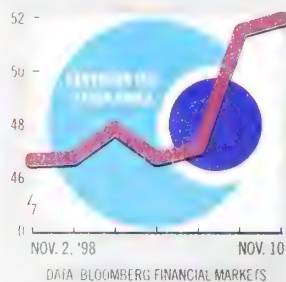
EXECUTIVE SUITE SCRAMBLE

THE RACE FOR THE CORNER office is on at Bristol-Myers Squibb. On Nov. 10, the drug giant announced a management reshuffling that has several senior executives gunning for the top job. Chairman and CEO Charles Heimbold will retire at the end of 2001, and as part of the reorganization, Executive Vice-President Kenneth Weg said he will retire in 2000. The leading contenders for chairman and CEO include 42-year-old Donald Hayden Jr., a 17-year Bristol veteran who was named head of worldwide medicines, and Richard Lane, 47, a former Merck executive who heads the U.S. drug business and who now will

CLOSING BELL

BOOSTER SHOTS

It was heartwarming news for Centocor. On Nov. 9, separate studies gave boosts to two of the biotech company's key products, and the stock jumped 9%, to 51%. One study showed that Remicade, a drug approved to treat a bowel disorder, was also effective in treating rheumatoid arthritis when taken with another drug, Methotrexate. Another showed that Centocor's ReoPro, which inhibits blood clots, cuts the risk of death by 57% for patients undergoing a procedure known as stent placement.



run worldwide pharmaceutical marketing, too. The shuffling comes as Bristol continues to ramp up its research-and-development spending in hopes of improving its roster of new drugs. Still, Bristol is expected to earn \$3.6 billion in 1998, up 13%.

MEDPARTNERS WILL TRY DRUG THERAPY

RICHES TO RAGS? MEDPARTNERS on Nov. 10 said it would exit the physician practice management business. From a standing start in 1993, MedPartners mounted a buying blitzkrieg that made it the largest PPM company, with 238 clinics and more than 10,000 doctors. In late 1997, MedPartners accepted a \$6.3 billion buyout offer from rival PhyCor. But PhyCor pulled out just before MedPartners disclosed an unexpected operating loss. MedPartners plans to rebuild using pharmacy-benefits management as a base.

MORGAN AGAIN WIELDS THE AX

FOR THE SECOND TIME THIS year, J. P. Morgan is laying off staff in response to market turmoil and investor concern over Morgan's lofty expenses. Sources close to Morgan say about 740 people will be axed this time, mainly in emerging markets and bond businesses. Morgan had 16,155 employees at the end of the third quarter, down nearly 5% from 1997. But will headcount really fall? Morgan is adding in some areas even as it cuts in others. "We are continuing to hire selectively and gain market share," says a spokesman.

NINTENDO: GETTING BACK IN THE GAME?

HAS NINTENDO FOUND A NEW Super Mario to revive sales?

HEADLINER: SCOTT BLUM

A COMPUTER DEALER TURNS MEDIA MAVERICK

Buoyed by the growth of his online computer store, Scott Blum, ceo of Buycomp.com, is ready to take on Amazon.com and Reel.com in books and videos. Buycomp claims sales of \$86 million in its first 11 months. Now, Blum is buying SpeedServe, the Internet division of Ingram Entertainment, the top movie and videogame distributor. And he has a deal in the works with distributor Ingram Book Group.

Unlike Amazon and other retail sites that offer chat and other amenities, Buycomp focuses on low price. "We think the model

can be applied to many different vertical markets," says Scott Russell, a general partner of Softbank



Technology Ventures, which owns 20% of Buycomp. Blum plans to rename the company Buy.com and the new online stores Buymovie.com and Buybooks.com. He's also searching for a new ceo and aiming to take Buycomp public in 1999. Blum, who two years ago settled with the SEC over charges of inflating results at Pinnacle Micro company he co-founded, figures he'd fare best as Buy.com's official visionary.

By Larry Armstrong

On Nov. 23, the company will launch *The Legend of Zelda: Ocarina of Time*, a new game for the N64 console priced at \$69.95. *Zelda* is the most engaging game yet for the N64, and the company aims to sell 2.5 million *Zelda* cartridges before the year is out. That would be a big boost for Nintendo N64 sales, which are trailing those of Sony's PlayStation. Sony also has a strong lead in new game titles. Market researcher NPD Group counts 131 new titles for PlayStation this year, compared with just 50 for the N64.

COMPAQ JOINS 'EM

ATTENTION SHOPPERS! COMPAQ on Nov. 11 began a major push to sell computers directly to customers by phone and over the Internet. Compaq had little choice:

More than a third of all are sold directly to customers by Dell and others. But Compaq risks alienating its dealers, which generate about 85% of its sales. It hopes to mollify them by letting them handle deliveries, giving them a crack at landing service contracts. Says CEO Eckhard Pfeiffer: "If you do not adapt your model to the way customers want to do business, you are going opportunity or giving business to competitors."

ET CETERA...

- Cargill plans to buy grain-handling assets of Continental Grain.
- More progress on arthritis: Hoechst says its drug Avcan slow joint damage.
- Fox Entertainment raises \$2.8 billion in the third biggest U.S. IPO ever.
- Callaway Golf is cutting its workforce by 24% and taking a charge of up to \$85 million.



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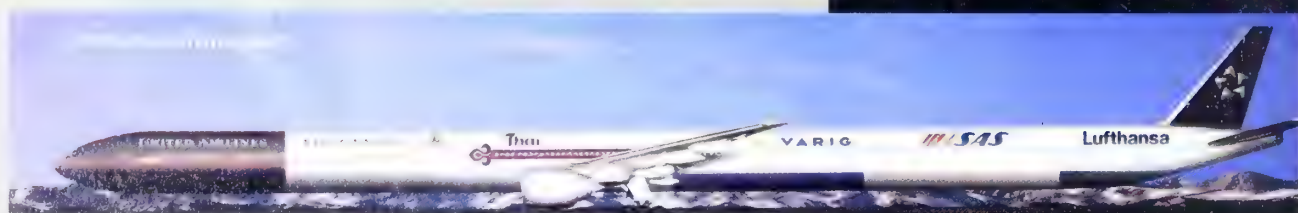
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ED BY OWEN ULLMANN

DONORGATE: FIAT DOG WON'T HUNT, EITHER

Republicans are finally starting to get it: The Monica Lewinsky scandal won't do in Bill Clinton. But they're still hoping to snare him with Donorgate, the fund-raiserenanigans that triggered a string of investigations. In on Nov. 9, Justice Dept. lawyers questioned the President about his role in raising money for campaign ads. As, Republicans are about to be disappointed again. Prospects for a chain of campaign-finance prosecutions that go to the Oval Office look dim. Why? Federal election laws are porous that it's nearly impossible to nail Clinton for violating them. What's more, prosecutors are finding it difficult to prove that Clinton intended to break the law.

On the surface, the probe of Clinton's 1996 re-election campaign continues to chug along, so far producing 14 indictments. Attorney General Janet Reno has until Dec. 7 to seek an independent counsel to determine if Clinton evaded existing limits with issue ads paid for by Clinton donors—the subject of the interview by Justice lawyers. In late November, Reno decided whether to name independent counsel to examine perjury allegations against President Al Gore and ex-White House Chief of Staff Harold M. Ickes.

LOOPHOLE. But the courts have gutted many key cases involving "soft money"—unregulated gifts to political parties—and money funneled from foreigners. In fact, most of the charges against Democratic fund-raiser Maria L. Hsia and Little Rock restaurateur Yah Lin "Charlie" Trie have been dismissed. Justice alleged that Hsia disguised illegal soft-money gifts as bogus donors—monks at a California Buddhist temple—but Federal Judge Paul L. Friedman tossed out charges Hsia led campaign committees to file false statements about the money's source. Only a minor fraud count remains. The case against Clinton chum Trie is even more prob-

lematic. Justice alleges he funneled overseas soft cash to Democrats via straw donors. But Friedman ruled that election laws bar only "hard-money" donations—gifts subject to strict limits—by foreigners. If upheld, the opinion opens up a broad loophole. It means future Presidential hopefuls can raise unlimited cash abroad—and that has serious implications for foreign policy. For example, a politician favoring an expansion of NAFTA might rake in Latin American donations. "It isn't a pretty picture," says Don Simon of the political watchdog group Common Cause.

Other cases ride on Justice's appeals of the lower court's decisions. They include similar charges of hiding donations to the Democrats brought Nov. 4 against Tennessee developer and Gore pal Franklin L. Haney. The rulings are "a setback, but not a fatality," insists a top Justice official.

Brave talk, but the situation could get even worse for campaign-finance cops. Both political parties are challenging a Federal Election Commission ruling that says they can pay for only 40% of issue ads with soft money. The parties want 100%. The U.S. Court of Appeals in Washington is expected to rule soon.

Soft cash was supposed to fund educational and get-out-the-vote efforts, not promote candidates. But lacking limits, it's easy to raise. The latest FEC figures show Republicans raked

in \$94 million in soft money for the '98 election, a 144% increase over '94. Democrats raised \$79 million, an 84% hike.

The outlook: Few Donorgate prosecutions will get past the nuisance-suit phase. New loopholes will make the next election the money-grubathon of the century. Clinton and Gore will skip away from the one scandal that could have inflicted some damage. Meanwhile, the GOP will cry foul while rolling in a fresh snowfall of special-interest cash.

By Paula Dwyer



TRIE: Key charges dropped

CAPITAL WRAPUP

KENNEDY SON MAY ALSO RISE

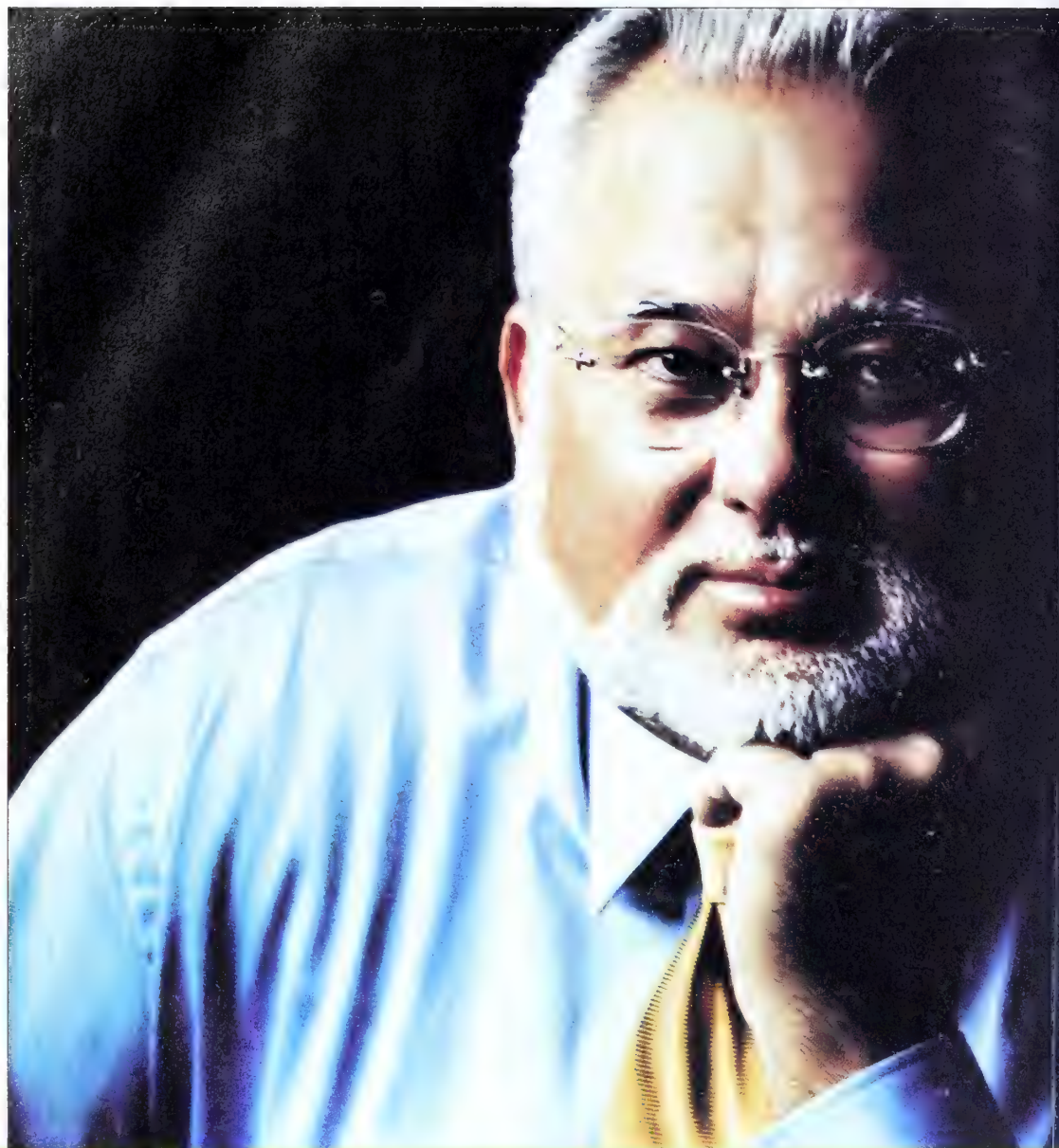
A new-generation Kennedy is expected to join the Democratic leadership on the Hill. Representative Patrick J. Kennedy of Rhode Island, son of Senator Edward M. Kennedy (Mass.), is a top prospect to head the Democratic Congressional Campaign Committee. The 31-year-old liberal has accumulated dozens of chits by campaigning for Democrats this fall. The only obstacle: a possible candidacy by California Representative Nancy Pelosi, a prolific fund-raiser.

THE PRICE OF VICTORY

► The Democratic Party's surprisingly strong showing on Election Day came at a high cost. A final campaign push sent the Democratic National Committee some \$9 million into debt. That's less than the \$15 million the party owed when Colorado Governor Roy Romer and Massachusetts businessman Steve Grossman took over the DNC in January, 1997. However, Romer and Grossman had hoped to hold the party's red ink to \$5 million at yearend.

UNION TURNOUT: HOW BIG?

► Was the Big Labor turnout for Democrats on Election Day exaggerated? Voter News Service, a consortium that conducts exit polls for the media, claimed that union voters made up 23% of the electorate in '98, up from 14% in '94. But VNS has since questioned its numbers, saying the higher union figure may stem from a change in its survey wording, not an actual jump in turnout. The AFL-CIO's response: The labor vote rose, even if VNS can't pinpoint how much.



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Transforming Transactions Into Relationships



REPORT CARD ON ASIA

How well—or badly—is each nation doing?

Amid the rubble of a cataclysmic year, Asia's economies are finally showing signs of life. At the Chow Tai Fook jewelry store in Hong Kong's Central district, where sales have languished for months, customers are back, snapping up gold and diamonds. The main streets of Seoul, nearly deserted in January, now hum with traffic. On weekend nights, revelers throng the dance floor of Jamz, Jakarta's hippest disco.

A full-fledged recovery in Asia is still many months away, as output continues to contract and layoffs, bankruptcies, and political tensions rise. But barring any more big shocks to the world fi-

nanacial system, there is clear evidence that the region's harrowing economic free fall is nearing bottom. Asian currencies have stabilized, foreign reserves have swelled, and interest rates have dropped. For the first time since July, 1997, Asia's limping Tigers see a ray of hope for a return to health.

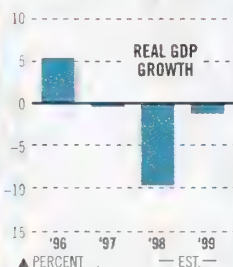
It is time, therefore, for a mid-crisis exam. The result is our Asian Report Card, which grades countries on how well they have implemented critical reforms. We look beyond market upticks to measure progress in bank recapitalization, corporate restructuring, consumer sentiment, political reform, and openness to foreign investment. The

countries that score well have the shot at attracting capital, a vital tool. Just to recapitalize their banks, Asian nations must raise \$900 billion. And they won't be able to rely solely on high domestic savings to fuel growth.

SPOTTY. Of the crisis countries, the best marks go to the Philippines and Thailand, which have done the best of political reform and adhered most closely to the International Monetary Fund's painful remedies. But Asia's overall performance is spotty. We got a few As—and loads of Cs and Ds. Although each country has set up mechanisms to clean up and recapitalize banks, the region—including Japan

THAILAND

Looking Up, But Rough Road Ahead



FINANCIAL REFORM	B+	Is moving quickest to sell bad debts, but banks must move faster.
POLITICAL REFORM	A-	Government pushing for vital legal reforms but legislature moving slowly.
CONSUMER CONFIDENCE	C-	Picking up slightly, but may be temporary because worst isn't over.
CORPORATE SECTOR	C	Still dismal, though some key conglomerates starting to shed assets.
FOREIGN INVESTMENT	C	Many deals in financial sector. Little manufacturing and telecom activity.

JAPAN

Asia's Albatross



FINANCIAL REFORM	C	Finally, a big bailout. But it's late, and fundamental woes remain.
POLITICAL REFORM	C	Ministries are battling attempts to limit government intrusion in the economy.
CONSUMER CONFIDENCE	D	Car and department-store sales sagging as shoppers brace for long recession.
CORPORATE SECTOR	B-	Despite weak profits, radical restructuring is rare. Only bright spot: exports.
FOREIGN INVESTMENT	B+	Foreign banks and brokerages are buying stakes in the financial sector.

hafting under a staggering \$1.7 trillion nonperforming loans. Only after debt overhang clears will banks be able to reignite Asia's economies by unleashing new credit.

The task of restructuring the hobbled corporate sector, meanwhile, is barely begun. True, there have been notable asset sales and mergers. Estimated \$60 billion in merger-acquisition deals will be completed in 1998. But that's not enough. While there have been some notable asset sales, most Asian corporate chieftains are largely unwilling to sell assets at prices that suitors are willing to pay. Many insolvent conglomerates have yet to even agree with creditors on debt-workout programs. Industries ranging from automobiles to chemicals and electronics will remain hobbled by inefficiency, overcapacity, and weak sales. Some 47% of industrial capacity in Thailand is idle. In the auto sector, Southeast Asia is using a paltry 5% of factory capacity.

The biggest drag on Asia's prospects for recovery is Japan. Its mandarins add about \$600 billion in bad bank loans. Yet outside estimates go well past \$1 trillion. Tokyo's rescue package sets aside \$500 billion in public funds to take insolvent banks, inject capital into weaker ones, and cover all depositors. The plan doesn't address the problem of lenders that remain less profitable than their major U.S. and European counterparts. And Japan hasn't

While full recovery is far away, there is evidence that the harrowing free fall is nearing bottom

begun to address the bigger issue of industrial restructuring.

Without a strong contribution from Japan, Asia's walking wounded have to rely on their own resources far more than they would like. Thailand gets a B+ on financial reform for making the most progress in clearing bad debts. Walk into a Bangkok bookstore and you can buy bilingual guides to property for sale at government auctions. What's more, the government this year has sold off \$900 million in finance company loans and other assets to foreign investors, who paid as much as 60% of book value. Thailand's policymakers have also allowed foreigners to buy stakes in financial institutions. Early this year, for instance, ABN Amro paid \$195 million for a 75% stake in Bangkok-based Bank of Asia. Yet one statistic shows how far Thailand still has to go: Nonperforming loans now come to some \$45 billion, or 35% of gross domestic product.

South Korea is giving off similarly mixed signals. So far, the government has bundled and sold only \$300 million of the \$30 billion in bad loans it has as-

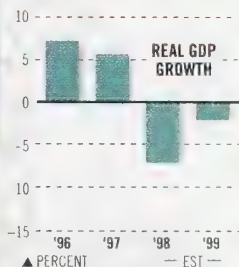
sumed from its banks. And South Korea still has some \$50 billion in dud loans to deal with after that. Some major business groups are selling assets: Ssangyong, once the country's sixth-largest *chaebol*, has virtually liquidated itself. But investors are waiting for the top five *chaebol* to join the party. So

far, their restructuring has been mostly talk. Yet at least some failed banks are up for sale. And because of falling imports, Korea now boasts a record \$45 billion in foreign reserves, up from virtually nothing last year.

TOUGH TASKS. Politics also plays a big role in determining a country's grade. That is a major reason why the Philippines scores high in BUSINESS WEEK's survey. Dismissed by many in business circles as an intellectual lightweight when he came into office in June, President Joseph E. Estrada has not deviated from the reform policies of his predecessor, Fidel V. Ramos. He also resisted pressure to help labor unions during their strike against Philippine Airlines Inc. Nor did Estrada bail out his tycoon friend Lucio Tan, the airline's owner. Now, investors feel more assured that Estrada will move swiftly to contain the crisis if it worsens in his country.

In contrast, Indonesia's new President B.J. Habibie, who succeeded toppled strongman Suharto, is tainted by his close association with his predecessor.

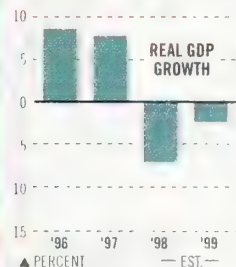
The Worst May Not Be Over



FINANCIAL REFORM	B	Headway on bank cleanup, but private debt bomb remains unresolved.
POLITICAL REFORM	B	President Kim is tackling corruption, but enacting reforms is tougher.
CONSUMER CONFIDENCE	D	Rising unemployment and wage cuts causing retail sales to plunge.
CORPORATE SECTOR	C	Dominance of biggest <i>chaebol</i> growing, not shrinking. Debts remain high.
FOREIGN INVESTMENT	C-	Far below expectations as <i>chaebol</i> resist selling assets to foreigners.

MA L A Y S I A

Gambling On Quick Fixes



FINANCIAL REFORM	D	Recapitalizing banks, but forcing them to lend more to weak companies.
POLITICAL REFORM	F	Regressing badly as Mahathir jails opponents and tries to stop protests.
CONSUMER CONFIDENCE	C+	Should rebound due to easier money, but could crash if policy backfires.
CORPORATE SECTOR	F	Bailouts rule as Mahathir continues to help his political cronies.
FOREIGN INVESTMENT	C	Electronics makers staying put, but currency controls spook new entrants.

sor. Until Indonesia holds elections in mid-1999, the risk of continued political turmoil—if not anarchy—remains high. That makes it hard for Indonesia to lure back the ethnic Chinese businessmen and billions in capital that fled the country after this spring's riots. That said, Habibie is making some progress. His administration has recently sped up efforts to restructure the debt-laden corporate sector. Yet the task ahead is mind-numbing. "Every bank in the country is insolvent," says the head of a leading Wall Street M&A practice.

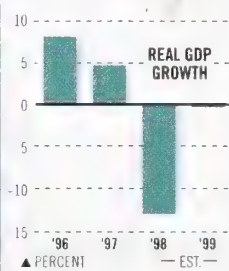
EMPTY BUILDINGS. No nation has done more to wound itself through bad policy than Malaysia. Prime Minister Mahathir Mohamad has cut the country off from the world's capital markets and stifled reform by jailing his former Deputy Prime Minister, Anwar Ibrahim. And he's making the country's debt burden, already some 170% of GDP, even heavier. So many loans are under water that the banking system needs \$16 billion to recapitalize. Yet the central bank is encouraging banks to make more loans. Malaysia scores poorly in restructuring as well, where bailouts of politically favored conglomerates are the rule.

INDONESIA

Still A Disaster Area



EMPTY SHELVES: Hurting



FINANCIAL REFORM	D	Slowest progress of IMF recipients in resolving bad loans or luring investors.
POLITICAL REFORM	C-	Democracy promised, but military still strong and violence continues.
CONSUMER CONFIDENCE	D	Remains extremely low, and little lasting pickup is expected this year.
CORPORATE SECTOR	D	Most big companies insolvent. Only now are debtors starting to devise workouts.
FOREIGN INVESTMENT	C-	Few big deals in wake of violence. Foreign applications surprisingly strong.

The woes of the weaker nations will drag down the potential high performers. In Hong Kong, consumer confidence has evaporated, with devastating effect on retailers. "It is hard to imagine sales increasing," says a glum Peter Lau, chairman of regional clothing chain Giordano International Ltd., which has stores throughout the region. One sign of the times: Price-

waterhouseCoopers has expanded its liquidation practice fourfold.

One country not featured in these tables could affect them all: China. Premier Zhu Rongji seems poised to reach his target of 8% growth this year through massive state investment to stimulate the economy. But by some estimates, China still has \$250 billion in bad loans. As Zhu opens credit spigots, he risks weakening banks even further. There's also still a risk that Beijing could devalue the Chinese currency, thereby initiating a fresh crisis.

Taken together, these report cards do offer some hope for investors—but only so long as Asia's governments concentrate on making their financial systems strong and their corporate sectors efficient, they stand a good chance of coming out of this financial crisis in

healthy shape. But countries that for short-term remedies could well end up looking like today's Japan, with stagnant growth and deep regrets over missed opportunities. Staying with the program can be painful. But those who do will lead the pack.

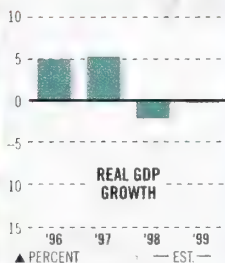
By Bruce Einhorn and Joyce Nathan in Hong Kong, with bureaus reports

HONG KONG

Identity Crisis



JOBLESS: Retailers reeling



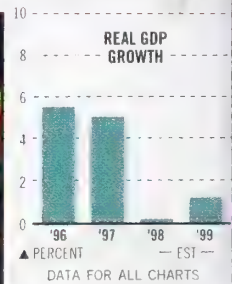
FINANCIAL REFORM	B+	Market meddling hurt government credibility, but bank regs are strong.
POLITICAL REFORM	B-	Beijing cut democratic reforms, but personal freedom remains high.
CONSUMER CONFIDENCE	C+	Layoffs and retail slump hurt ordinary citizens, but a stock jump may help.
CORPORATE SECTOR	A-	Property barons are riding out the crisis, but profits are weak.
FOREIGN INVESTMENT	A-	Multinationals like pro-business tone and role as hub for China business.

PHILIPPINES

Surprising The Skeptics



ESTRADA Political strength



FINANCIAL REFORM	B+	Several bank mergers; takeovers expected. Tougher regs of bad loans.
POLITICAL REFORM	A	President Estrada sticks to free-market policies and avoids crony bailouts.
CONSUMER CONFIDENCE	C-	Unemployment rising, and consumers complain of commodity price hikes.
CORPORATE SECTOR	C	Credit crunch is slowly easing. Exports growing, but at a slow pace.
FOREIGN INVESTMENT	B-	Lower than last year, but foreign interest in electronics still strong.

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GERMANY

HE TALKS, BUSINESS TREMBLES

Finance Minister Lafontaine is throwing his weight around

When German Chancellor Gerhard Schröder made his first policy speech on Nov. 10, it sounded more like damage control than the agenda of a brand-new government. Schröder tried to reassure Parliament and a worried business community that he and his fellow Social Democrats would continue on the path of fiscal discipline. But his words did little to soothe his listeners' fears. The very same day, the chief aide to Finance Minister Oskar Lafontaine had issued a stern warning: If Europe's central banks don't cut interest rates to spur economic growth, he warned, governments might open the spending spigots—even if that means relaxing the rules for monetary union.

The threat carries real weight. In the widening split between centrist Schröder and his Finance Minister, Lafontaine seems to wield the clout. Never in post-war Germany has a leftist activist had as much power as Lafontaine has now. His strong support from the Social Democratic rank and file gives Lafontaine, 55, enormous leverage within Schröder's new government. He already has formed a superministry, adding to his Finance portfolio powers formerly held by the Economics Ministry, such as policy regarding Europe's new single currency.

Now, Lafontaine is taking his act



WHERE LAFONTAINE PARTS COMPANY WITH BUSINESS

MONETARY POLICY Lafontaine is lobbying the Bundesbank and the new European Central Bank to cut interest rates to boost growth. Business wants European monetary policy to stay independent of politics.

ECONOMICS Lafontaine wants to boost the German economy with tax cuts for lower-income earners. Business prefers structural reforms such as looser labor regulations and government spending cuts.

REGULATION Lafontaine wants international regulation of banks and hedge funds and thinks the euro should trade in a band against the dollar. Business believes this is too much government intervention in financial markets.

DATA BUSINESS WEEK

global. He and French Finance Minister Dominique Strauss-Kahn plan to meet in Bonn on Nov. 16 to formulate a new European economic plan, for which they hope to gain backing all across Continental Europe. He will pitch his ideas in the U.S. on Nov. 20, when he is scheduled to meet with U.S. Treasury Secretary Robert E. Rubin and Federal

Reserve Board Chairman Alan Greenspan in Washington.

Lafontaine's aim is to move economic policy in Germany and the rest of Europe considerably toward the Keynesian left. Before he meets with Rubin and Greenspan, for instance, he hopes to forge a European consensus on the need to stabilize foreign-exchange markets after the single currency is created next year. He thinks the euro should fluctuate only in a predetermined trading range against the dollar and other major currencies.

The Finance Minister's broader views are spelled out in *Don't Be Scared of Globalization*, a book he published last year with his wife, economist Christa Mühlhölzer. Both believe that Germany and Europe must lessen their dependence on exports and do more to boost domestic demand. With European inflation running up to 1%, Lafontaine is in some room to ease tight spending that Continental governments practiced during the runup to the euro. As he never fails to remind central bankers, he thinks the main way Europe can promote growth is by slashing interest rates from 3.3% with which the European Central Bank is expected to usher in the euro in January.

TIGHT DISCIPLINE. Business doesn't like his hearing. Many executives believe Schröder made a sort of Faustian pact with Lafontaine when he got elected on Sept. 18. Lafontaine whipped the party into a backfire against Schröder and then disciplined during his campaign. Now, German Finance Minister Hans-Olaf Henkel,

of the Federation of German Industries, says, "we find ourselves in the difficult situation of having someone who knows nothing about business, who never studied economics, telling us what we should think about business and economics."

Such fears are being fanned by Lafontaine's politicking over interest rates. He is making a play to gain leverage

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over the new ECB. Former Chancellor Helmut Kohl tried to insulate the bank from such pressure by giving it the same legally mandated independence as the Bundesbank. But there's a loophole: If enough of the euro zone nations agree, they can instruct the ECB on exchange-rate policy. Lafontaine and Strauss-Kahn are worried that the euro will be born too strong, potentially killing export growth. If they can win a few other governments to their side, they will theoretically have the power to push the European Central Bank to drive the euro down by cutting rates. "That could set up a huge conflict between the ECB and the politicians," says Ralf Hoffmann, a Deutsche Bank economist in London.

PET PROJECTS. Whether things will ever go that far is doubtful. Financial markets would likely tank at any sign that politicians are successfully pressuring the ECB. Already, many German executives are up in arms over Lafontaine's diatribes at the Bundesbank and his tepid tax-reform program. "I'm disturbed," says Siemens Chief Executive Heinrich von Pierer. "I think it would be a big mistake if the government moves onto a collision course with the elites in this country."

The big question is whether Schröder will move to rein in his Finance Minister. Many of Lafontaine's pet projects have little prospect of success. His exchange-rate target idea was roundly rejected at the last Group of Seven meeting and probably won't get a much better reception from Rubin and Greenspan on Nov. 20. There also are signs that Lafontaine's tactics are making Schröder jittery about his poll ratings. The Chancellor has chastised Lafontaine for lobbying publicly for interest-rate cuts rather than jawboning central bankers in private. And Schröder recently announced new measures to cut the tax burden on German companies by 50% more than planned, or about \$9 billion—with most of the cuts aimed at helping small to midsize businesses.

Business is clamoring for more such moves. But Schröder may not be able to change Lafontaine's agenda. The Finance Minister is a masterful tactician. The German newsweekly *Stern* summed up the feeling of many observers when it ran a recent cover story on Lafontaine entitled "The Boss." That may prove to be an exaggeration. But Oskar Lafontaine could shake Europe Inc. to its foundations.

By Thane Peterson, with Karen Lowry Miller, in Frankfurt

BANKING

DOOMSDAY FOR RUSSIAN BANKS

After the carnage, a flashback to a Soviet-style system

Russia's 1,550 commercial banks, most technically bankrupt, face a crucial deadline. On Nov. 17, the Russian government will lift the moratorium on debt repayments that it imposed on banks in August. The move will be the signal for European and U.S. creditors to launch a flurry of lawsuits to recoup up to \$30 billion they are owed by the banks. And it will touch off a shakeup in Russia's peculiar, postcommunist banking system.

Hundreds of banks are likely to go out of business or be swallowed up by

As a bank shakeout unfolds, it is likely to produce a system resembling that of the Soviet Union of the late 1980s. Three state-controlled banks are expected to dominate: Sberbank, the state savings bank; Vneshtorgbank, the state trade bank; and Vneshekonombank, which issues government obligations. The government also plans to take over SBS-Agro, a commercial bank with near monopoly on farm lending that has heavily in T-bills.

Finally, a cluster of regional or state banks will also be allowed to operate. About 200 medium-size commercial banks that survived the crisis will stay in business. Others, such as once powerful Oneximbank, may close but will remain inactive unless the tycoon owners scrape together new capital—unlikely at the time soon. The surprise winners could be foreign banks. Even Russian companies are turning to them. Some 18 foreign banks have licenses in Russia,



NEW MANAGEMENT: The government wants this bank

rivals. From Inkombank, Russia's third-largest commercial bank, to regional institutions, banks were holding billions of dollars worth of Russian Treasury bills in August when the government defaulted. The simultaneous devaluation of the ruble wiped out two-thirds of their assets. Now, they can't resume operations without a bailout. But Central Bank Chairman Viktor Gerashchenko is confounding expectations by ruling out a sweeping rescue plan.

The banks have only themselves to blame. After the August debacle, the Central Bank gave them about \$3.5 billion in credits. But much of the money was wasted as banks switched ruble credits into dollars and transferred them to hard-to-trace accounts abroad. Now Gerashchenko is imposing controls to ensure that any new credits are used only to repay depositors or creditors.

cluding Citibank and Bank Austria.

Tensions between foreign creditors and local banks are set to rise. Although most foreigners have written off the Russian debt, that won't stop them from suing Russian banks after Nov. 17. Already, Lehman Brothers Inc. and Deutsche Bank have filed suits in European courts to freeze Russian assets. Meanwhile, the government and foreign creditors are close to an agreement to restructure short-term debt. But the Russian offer is worth an effective veto on the dollar at most, says investment bank MFK Renaissance.

So foreign investors are likely to be looking warily on Russia. The decision to end the debt moratorium and force some banks to sink is only a start. A long and messy effort to create an effective banking system lies ahead.

By Patricia Kranz in Moscow



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EDITED BY JOHN TEMPLEMAN

CAN CARDOSO STEER BRAZIL AWAY FROM THE ABYSS?

President Fernando Henrique Cardoso has plenty to celebrate. After his Oct. 4 election victory, he is close to winning a rescue package worth about \$40 billion for Brazil led by the International Monetary Fund. Relieved investors toasted his successes by pushing São Paulo's stock index up 16% in the first week of November. And capital flight—which in September drained off over \$20 billion, or one-third of Brazil's currency reserves—has slowed to a trickle.

But the party could soon be over. Cardoso must enact a slew of tax increases and spending cuts to implement a three-year, \$84 billion austerity program. Opposition from Congress and corporate lobbyists is mounting on measures such as plans to nearly double the tax rate on financial transactions, to 0.38%. But unless he can push the measures through by early next year, investors may again head for the exits and the IMF could back off.

Timing is critical. The transactions tax and other legislation must pass through two rounds of congressional voting and will be approved in January at the earliest. If global financial markets remain calm, that might not matter. But renewed jitters could prompt a speculative run that could force a devaluation of the real. Analysts such as Deutsche Bank economist Dalton Gardiman, reckon it is 15% to 20% overvalued. Worse yet, Brazil might default on part of its \$290 billion in public debt.

SKEPTICISM. Much is riding on Cardoso's efforts in Brazil, by far Latin America's biggest economy. His success could be a lifesaver for its neighbors. Recently, other Latin stock markets have coattailed Brazil's, to post their strongest rallies since early September. On the other hand, chaos in Brazil could quickly engulf the rest of the region.

There's plenty to justify investors' skepticism. Last year, after Asia's financial meltdown, Cardoso announced an impres-

sive \$18 billion in budget cuts and tax hikes to ward off speculative attacks. But once the markets calmed, he quietly shelved most spending cuts and a public-sector pay freeze. Brazilian lawmakers, too, have embraced austerity before only to buckle when lobbyists squawked. "A sense of urgency is always subject to local politics," says Walder Góes, a political analyst in Brasília.

Cardoso has factored some political wiggle room into his package. He could, for example, accede to a move by Congress

to halve the proposed increase in the transactions tax. But that would eliminate \$2.5 billion of the \$13 billion in new revenues that Cardoso needs next year. There's a risk such concessions could backfire badly if investors and the IMF interpret them as a serious erosion of the plan. **DAWDLING.** Brazilian-style politics could well create that impression. Sometimes, Congress will labor over major reforms for years, approve in principle—but dawdle in passing nitty-gritty laws to implement them. That happened last year with measures to make it easier to hire public-sector workers. Often, Congress dodges hot issues altogether, such as drawing up a new tax code to ease the burden on business. And other times it deals in half measures. For example, on Nov. 4, after four years of dithering, Congress finally approved changes in the social security system, which is running an annual deficit of \$35 billion. But then it set the national retirement age at only 48 for women and 53 for men.

So far, Brazil has kept itself from becoming the next emerging market to fall into the abyss. A deal with the IMF should ease the debt burden and stave off a Russian-style default. But investors, who have waited years for Cardoso to cut spending and enact reforms, are losing patience. If Cardoso doesn't deliver now, Brazil won't get another chance.

By Ian Katz in São Paulo



CARDOSO: Now for austerity

GLOBAL WRAPUP

NABBING A MEXICAN FUGITIVE

► The arrest in Australia on Nov. 11 of fugitive Mexican financier Carlos Cabal Peniche brings to an end a four-year hunt for a man who symbolizes corporate greed under President Carlos Salinas de Gortari. Salinas' successor, President Ernesto Zedillo, points to Cabal's promised extradition as proof that he's serious about punishing white-collar crime. Cabal is accused of embezzling \$700 million from two banks he controlled.

The arrest may help Zedillo in the

opposition-led Congress, which is balking at funding for a \$65 billion bank bailout. But Cabal's return could also cause headaches for Zedillo. The former banker is alleged to have helped finance Zedillo's 1994 presidential campaign, possibly with fraudulent loans from his own failed banks, whose losses could be covered by the bailout.

IT'S AIRBUS vs. BOEING—AGAIN

► Europe's Airbus Industrie is battling Seattle's Boeing Co. over a \$700 million plane order from El Al Israel

Airlines Ltd. No big surprise there, except that the European consortium vowed last year it would never again compete to supply El Al.

Israel's national airline is one of the few whose fleet of aircraft is 100% Boeing. But what turned Airbus off last year was its failure to win an order for five short-range jets, after heavy lobbying by White House and U.S. Commerce Dept. officials on Boeing's behalf. With Boeing facing tough times, industry analysts expect Washington to start twisting arms again soon.

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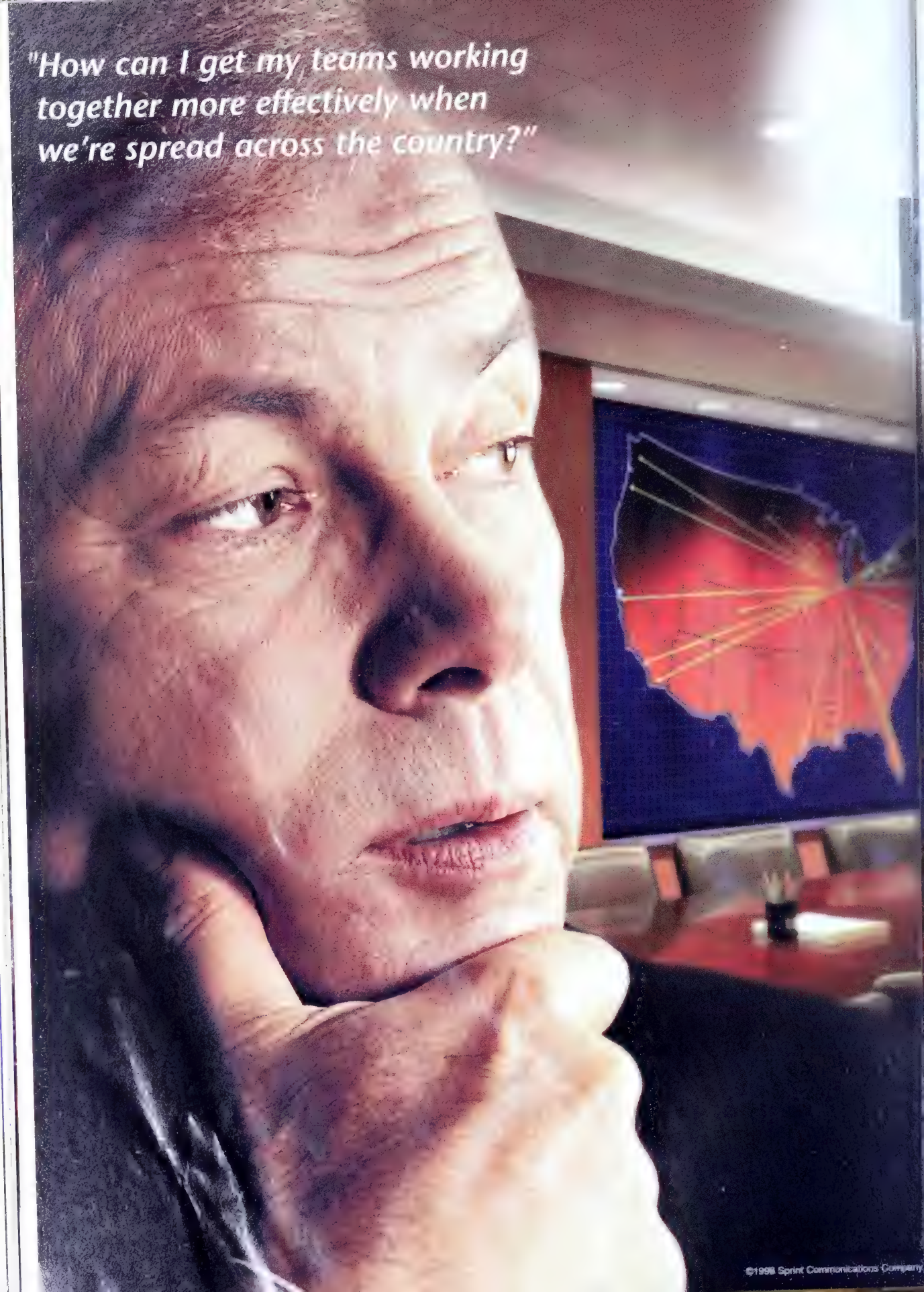
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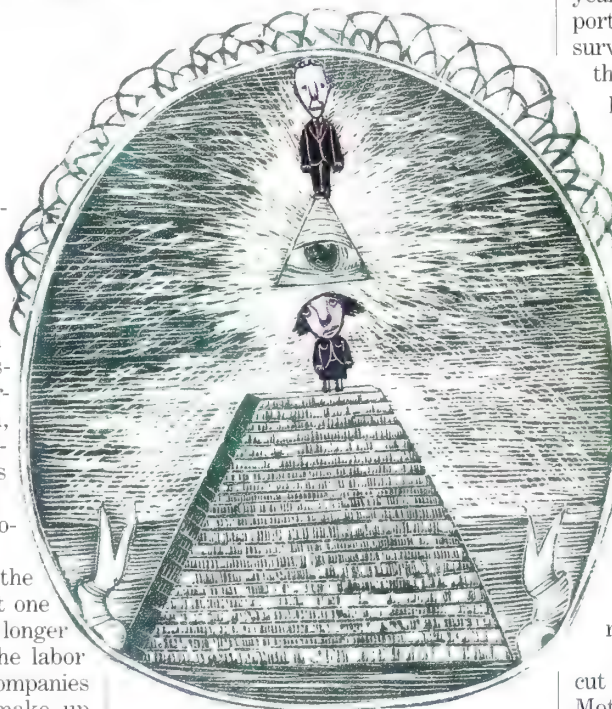
Women are making progress in Corporate America—but it's slow going indeed

At first glance, there's welcome news here. Women now account for 11.2% of officers at large corporations, up from 10.6% last year and 8.7% in 1995. More than half of the 500 companies assessed by Catalyst, the not-for-profit research organization, have more than one female officer, and a few big employers are approaching gender parity.

So Corporate America is doing better by women. Right?

On the other hand, consider the raw number—11.2%. That's just one officer in nine—a generation or longer after women began entering the labor force *en masse*. In a scant 32 companies of those studied do women make up more than a quarter of top management. And at 125 employers—that's actually more than last year—women are shut out. General Electric: No women officers. Exxon: Zero. Philip Morris, Intel, Compaq: Not a one.

"DISAPPOINTING." The few women who do attain the executive suite, moreover, still occupy mostly staff positions—corporate marketing, human resources, and the like. They hold just 6.2% of the line posts that, with profit-and-loss responsibility, are viewed as more critical within organizations. And at the top, women still earn substantially less than their male counterparts.



Where Women Thrive...

Companies where a third or more of officers are women

	WOMEN OFFICERS	PERCENT OF TOTAL
H.F. AHMANSON*	5	50%
CORESTATES FINANCIAL*	2	40
NORDSTROM	14	40
FANNIE MAE	58	39
PACIFICARE HEALTH	12	39
LINCOLN NATIONAL	5	38
SLM HOLDING	28	38
DAYTON HUDSON	7	35
KNIGHT-RIDDER	8	35
BJ'S WHOLESALE CLUB	2	33
PAINWEBBER GROUP	2	33
PITNEY BOWES	5	33

*Acquired in 1998

Depends on the Industry

Industries with the highest and lowest percentage of women among corporate officers

TOP FIVE	
SAVINGS INSTITUTIONS	32%
DIVERSIFIED FINANCIAL	31
PUBLISHING, PRINTING	27
MUTUAL LIFE & HEALTH INSURANCE	18
OIL AND GAS PIPELINES	17
BOTTOM FIVE	
TRUCKING	0%
SEMICONDUCTORS	2
WASTE MANAGEMENT	3
COMPUTER PERIPHERALS	4
MINING & CRUDE-OIL PRODUCTION	4

Promising, then, or bleak? Catalyst, which has studied women in business since 1962, thinks both. The results "bound to be disappointing," says She Wellington, Catalyst's president. At the same time, she notes, women have become more ingrained strategically in organizations, such that their overall gain no longer are so vulnerable to economic gyrations or bouts of restructuring.

Catalyst invented its census three years ago, basing the count on 10-K reports, proxy statements, and follow-up surveys. It's an imperfect analysis, since the definition of "officer," as recorded in public filings, isn't always consistent. General Electric Co., for example, which lists just 23 senior officers, its 10-K, says it actually has a total of 140, of which 10 are women. **MIXED SIGNALS.** Catalyst's census does, however, provide a measure over time of women's advancement—or lack thereof. And clearly, women at some companies are shining. At Nordstrom, Fannie Mae, and PacificCare Health Systems, they hold around 40% of the officers' slots. Fannie Mae Vice-Chairman Jamie S. Gore and Andrea Jung, president of Avon Products, are both in positions to take over their companies' top job within a few years, as are Lucent Technologies' Carleton S. Faria and Patricia F. Russo (page 18).

Beyond those few, however, clear-cut success stories are hard to come by. Motorola Inc., for one, has won praise for requiring its senior managers to identify and groom women and minority successors. The number of female vice-presidents soared to 41 from 30 the last decade. Yet 3 of its 149 officers are female. Texas Instruments Inc. and Amoco Corp., both well-known for diversity efforts, have no women officers. While Amoco managers continue to be judged partly on the diversity of their teams, three senior women who left the past year all have been replaced by men.

Even where women have won officer status, they face a startlingly wide pay gap. Women among the five highest paid officers of the

Women at the Top: A Scorecard

Among the nation's largest companies, few have more than nominal representation by women among their corporate officers and directors. Below, Catalyst's 1998 tally of women at the 50 biggest employers

	OFFICERS		DIRECTORS		OFFICERS		DIRECTORS
	NUMBER OF WOMEN	WOMEN'S % OF TOTAL			NUMBER OF WOMEN	WOMEN'S % OF TOTAL	
ALSTATE	2	13.3%	12.5%	J.C. PENNEY	1	7.1%	18.2%
AMERICAN INTERNATIONAL	3	5.7	5.9	JOHNSON & JOHNSON	1	6.7	23.1
AMOCO	0	0.0	15.4	KMART	2	4.6	14.3
AT&T	4	22.2	9.1	KROGER	1	9.1	21.4
CHRYSLER	2	14.3	7.1	LOCKHEED MARTIN	4	7.9	11.1
CELL ATLANTIC	3	20.0	18.2	LUCENT TECHNOLOGIES	3	15.0	11.1
DEING	1	4.2	7.7	MERCK	5	31.3	15.4
CHASE MANHATTAN	6	21.4	17.7	MERRILL LYNCH	2	10.5	13.3
EXXON	1	5.6	15.4	METROPOLITAN LIFE	4	10.5	18.8
GENSLER	1	3.3	7.7	MOBIL	1	10.0	14.3
GENCORP	1	7.1	7.1	MORGAN STANLEY	2	16.7	20.0
GENPAQ	0	0.0	9.1	MOTOROLA	3	2.0	11.8
GENAGRA	4	12.5	12.5	PEPSICO	1	8.3	7.1
GENYON HUDSON	7	35.0	27.3	PHILIP MORRIS	0	0.0	14.3
GENPONT	4	6.5	14.3	PROCTER & GAMBLE	1	3.0	11.8
GENXON	0	0.0	16.7	PRUDENTIAL INSURANCE	4	21.1	13.6
GENNIE MAE	58	39.5	27.8	SAFEWAY	3	23.1	0.0
GENORD	5	9.6	18.2	SBC COMMUNICATIONS	5	26.3	11.1
GENERAL ELECTRIC	0	0.0	12.5	SEARS ROEBUCK	1	7.7	18.2
GENERAL MOTORS	4	5.6	20.0	STATE FARM INSURANCE	31	14.8	15.4
GENE	2	10.5	8.3	TIAA-CREF	1	9.1	25.7
GENWLETT-PACKARD	4	13.3	7.7	TEXACO	2	11.1	15.4
GENOME DEPOT	2	7.1	16.7	TRAVELERS GROUP	3	10.7	14.3
GENM	4	8.5	18.2	UNITED TECHNOLOGIES	2	4.4	15.4
GENTEL	0	0.0	9.1	WAL-MART STORES	3	5.3	15.4

based on information reported by the 500 biggest public corporations, based on revenue, in 1997 annual reports, proxy statements, and 10-K statements, and confirmed by mail surveys of its officers and directors as of Mar. 31, 1998, or earlier.

DATA: CATALYST

panies, Catalyst found, took home 68% of the earnings of their male counterparts. Even adjusted for age differences, for the preponderance of women were-paid staff roles, and for the tiny of women CEOs, a gap persisted. Male chief financial officers, for example, earned 77% of what male CFOs made. The upshot: "In the upper echelons, it's all a white male preserve," says John Hartmann, director of the Institute for Women's Policy Research. "Why are we surprised?" Indeed, women throughout the economy earn 26% less than men, according to Labor Dept.

In her own studies in 1995 via the U.S. Bureau data, Hartmann found, shadowing Catalyst's results, that far outnumbered women among paid managers.

What follow are reports from the field, where the tidings are as mixed as the data would suggest. H. F. Ahmanson & Co., the California thrift that topped Catalyst's list, disappeared this year in a

merger with Washington Mutual Inc.; as of Oct. 1, all five of its women officers were out of jobs (below). Meanwhile, at Lucent Technologies Inc., the three-year-old spin-off from AT&T, women are thriving at the highest levels. Promising or bleak? A bit of both.

By Keith H. Hammonds in New York, with bureau reports

AHMANSON: PARITY LOST

With great earnestness, Charles R. Rinehart and three of his top female managers trooped onstage last August at the Marriott Hotel in downtown Los Angeles. They were there to tell several hundred executives attending a business speakers' series how H. F. Ahmanson & Co., a \$55 bil-

lion-in-assets California savings and loan, had pulled off a feat nearly unheard of in Corporate America: gender parity in the executive suite. "The way to be successful in business is to find a competitive advantage," Rinehart told the lunchtime crowd. For Ahmanson, "one obvious advantage was to recruit women."

This was a bittersweet occasion, Rinehart knew. In March, Ahmanson had agreed to be acquired. Within weeks, it would exist only in the belly of its voracious competitor, Washington Mutual Inc. In the wake of that \$6.4 billion deal, Rinehart, his top managers, and about 3,000 other employees would be out of work. And Ahmanson's diversity strategy—arguably the most successful ever at putting women into top management—would vanish.

Ahmanson's dissolution symbolizes the fragility of diversity efforts in the face of financial and strategic demands. Half of the thrift's top 10 executives were

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BEFORE THE BUYOUT

Lack of direct operating experience didn't stop Studenmund, Kleiner, and Anderson from excelling

women—a ratio unmatched among large employers. Two were among the company's five top earners. Moreover, over the past two years, the visibility of women at the top had made Ahmanson a magnet for female talent at all levels. In all, women made up roughly half of its 10,300 headquarters and regional managers.

Yet Ahmanson was stuck in a dreary, low-return business and faced competitors that could either buy it or bury it. So Rinehart sold at the market's top and sealed his team's fate. While Washington Mutual, with three women among its own 11 officers, has a respectable record of promoting women, it has seen to it, in almost all of its many recent deals, that acquired management exit.

RAPID MAKEOVER. As of Oct. 1, the Ahmanson execs were out. Rinehart, 51, with a severance package, including options, of about \$30 million, plans to teach high school math. Anne-Drue M. Anderson, head of mortgage lending, is volunteering at an east Los Angeles food bank. Jaynie Studenmund, who ran retail banking, traveled to Europe and says she is on sabbatical, spending time with her young kids and working on nonprofit boards. Madeleine A. Kleiner, former head of administration, attends all her daughter's cross-country meets and plays a lot of golf. All three women say they won't return headhunters' calls until after Jan. 1.

The hopeful story that survives them is how Rinehart, a grandson of one of the first female branch officers at Bank of America, rapidly made over his man-

H.F. AHMANSON & CO.

Savings-and-loan holding company acquired on Oct. 2 by Washington Mutual

WOMEN OFFICERS	5
PERCENTAGE OF TOTAL OFFICERS	50%
TOP WOMAN OFFICER	
Madeleine A. Kleiner, Sr. Exec. V-P	
WOMEN AMONG TOP FIVE EARNERS	2
WOMEN DIRECTORS	2 of 15



agement team, attracting women from outside the company to join the top ranks. "He was as close to gender-blind as you're likely to get," Catalyst's Wellington says. "He was interested in performance, and he created a culture that encouraged performance."

Before Rinehart became CEO in 1993, Ahmanson had no great history of diversity, with only a few women above the rank of regional branch manager. The company never had any formal program, such as mentoring or quotas, to promote women executives. Anderson recalls that there wasn't even a women's rest room on the floor where board meetings were held when she joined the company in 1993.

Rinehart ordered headhunters to screen for both women and men who could help him change the thrift's culture. When it came to accommodating the needs of working parents, the CEO led by example, sometimes leaving at 3 p.m. to coach his kids' basketball games and making up the time later. He encouraged execs who reported directly to him, most of whom had young children, to do the same.

More important, Rinehart was willing to take risks on female executives who lacked direct experience for operating

roles. Anderson, a former bank analyst at First Boston, was hired as treasurer in 1993, then promoted to head marketing. In 1997, she took over residential lending, the biggest chunk of Ahmanson's business. Less than two years after Kleiner joined in 1995 as general counsel, she was named chief administrative officer, part of a four-member Office of the Chairman.

BOXED IN. Rinehart & Co. brought Ahmanson back from the lows of the California real estate crisis of the early 1990s, producing return on equity of 17% in its last fiscal year and tripling its stock price since 1994. But by this year, Ahmanson was losing steam. It had ceded significant market share to acquisitive rivals. And its deposit-operating system would have required a massive investment to expand. After losing out on Washington Mutual in a 1997 bid to take over Great Western Financial Co., Ahmanson concluded it had little choice but to join forces with the Seattle giant.

The deal was a boon to shareholders, who got a 12% premium on their stock. And if corporate women everywhere lost a beacon of promise with Ahmanson's demise, Ahmanson's women did just fine. Together, the five top officers took away severance packages

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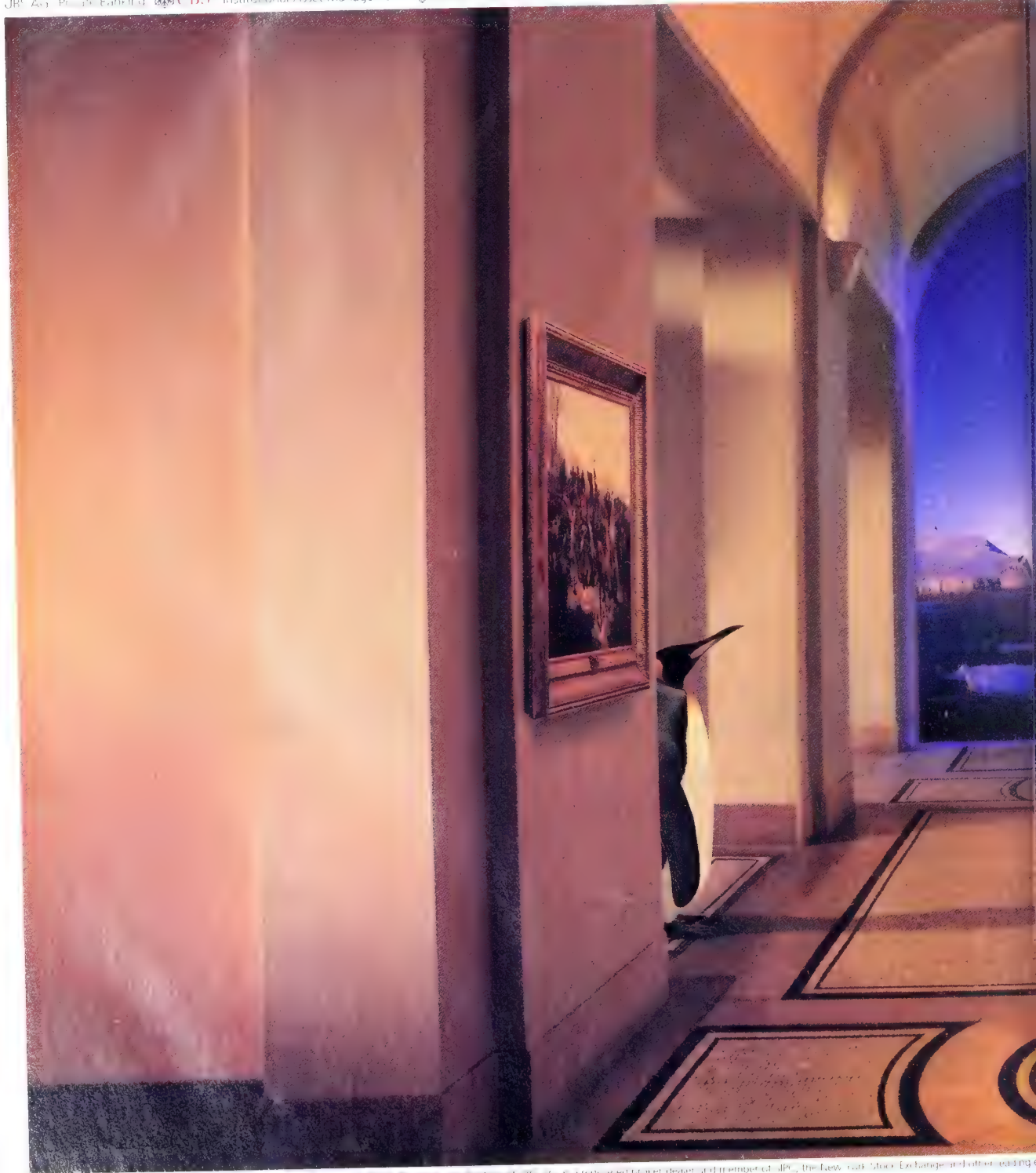
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Social Issues

taling over \$20 million—and those who haven't found new jobs say they have plenty of opportunities. Think of it as five little cracks in the glass ceiling.

By Kathleen Morris in Los Angeles

LUCENT: CALLING ALL MAVERICKS

Lucent Technologies Inc. has two women in the highest reaches of its management team and has installed dozens more just below them. Its playbook: Ignore the usual diversity somersaults. Toss hiring quotas and gender-based succession planning. Just find good people, hold them to high standards, and judge them on performance.

That's Lucent's line, anyway. Its executives also talk about the quest for intellectual diversity—for people who bring specific talents, who have lived abroad, or who have a special experience with a market or client group. "If you bring in diverse perspectives, the demographic diversity follows," says Patricia F. Russo who, as executive vice-president for strategy and administra-

tion, is Lucent's highest-ranking woman.

In truth, Lucent does promote the same sort of mentoring relationships that other big companies do to foster women's advancement, and it sustains some 30 women's employee networks. Yet it also mostly lives up to its own billing as a meritocracy. Spun off three years ago from AT&T and caught up ever since in fierce competition with telecommunications-equipment rivals Cisco Systems and 3Com, Lucent simply hasn't had time to install a glass ceiling.

HEIRS APPARENT. Just 3 of its 20 corporate officers are women, an above-average but unspectacular statistic. What's more impressive is that Russo, 46, and her near-equal female counterpart, 44-year-old Carleton S. Fiorina, have jobs at the highest level in what was long a male-dominated industry. Both are fair bets to take over as CEO someday. Below them, women make up 19% of Lucent's 328 vice-presidents and executive directors and 25% of all middle managers.

Lucent started out with a strong inheritance from parent AT&T, which has long pursued diversity and family-friendliness. But as it prepared for independence, the new company was also able to draw together a varied management

team, mostly from outside the corporate mainstream. Russo, an IBM sales veteran, was the first woman to head an AT&T business unit. Fiorina, now group president for the key Global Service Provider business, joined AT&T after drifting through a succession of jobs, then moving from sales to engineering to marketing. Lucent "was a part of the [AT&T] organization where people who were mavericks gravitated," bringing diversity with them, says David A. Nadler, chairman of Delta Consulting Group.

Then-CEO Henry B. Schacht, recruited

LUCENT TECHNOLOGIES

Telecommunications-equipment manufacturer that was spun off from AT&T in 1995

WOMEN OFFICERS

3

PERCENTAGE OF TOTAL OFFICERS

15%

TOP WOMAN OFFICER

Patricia F. Russo, Executive V-P

WOMEN AMONG TOP FIVE EARNERS

1

WOMEN DIRECTORS

1 of 9

One



wholly



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NO SOMERSAULTS NEEDED

"If you bring in diverse perspectives, the demographic diversity follows," says Exec V-P Russo

ed from Cummins Engine Co., and President Richard A. McGinn tried to define a new culture based on performance. "This company is more of a meritocracy, and these are people who thrived in the environment," said Peter Bernstein, president of telecom consultant Infonautics Consulting Inc. McGinn, now chairman and CEO, encouraged managers to take on unfamiliar challenges, something that appealed to women such as Russo who, after turning around Lucent's business-communications-systems unit, was handed responsibility for strategy and administration.

It's not a company for the faint of heart. "I'm not going to tell you this place is heaven," says Kathleen M. Fitzgerald, 48, the daughter of an AT&T operator who is senior vice-president for public relations. "It's relentlessly going after customers," setting a pressure-packed pace. But top women seem to be thriving in that culture. No diversity somersaults needed.

*By Roy Furchgott in
Murray Hill, N. J.*

global



network.

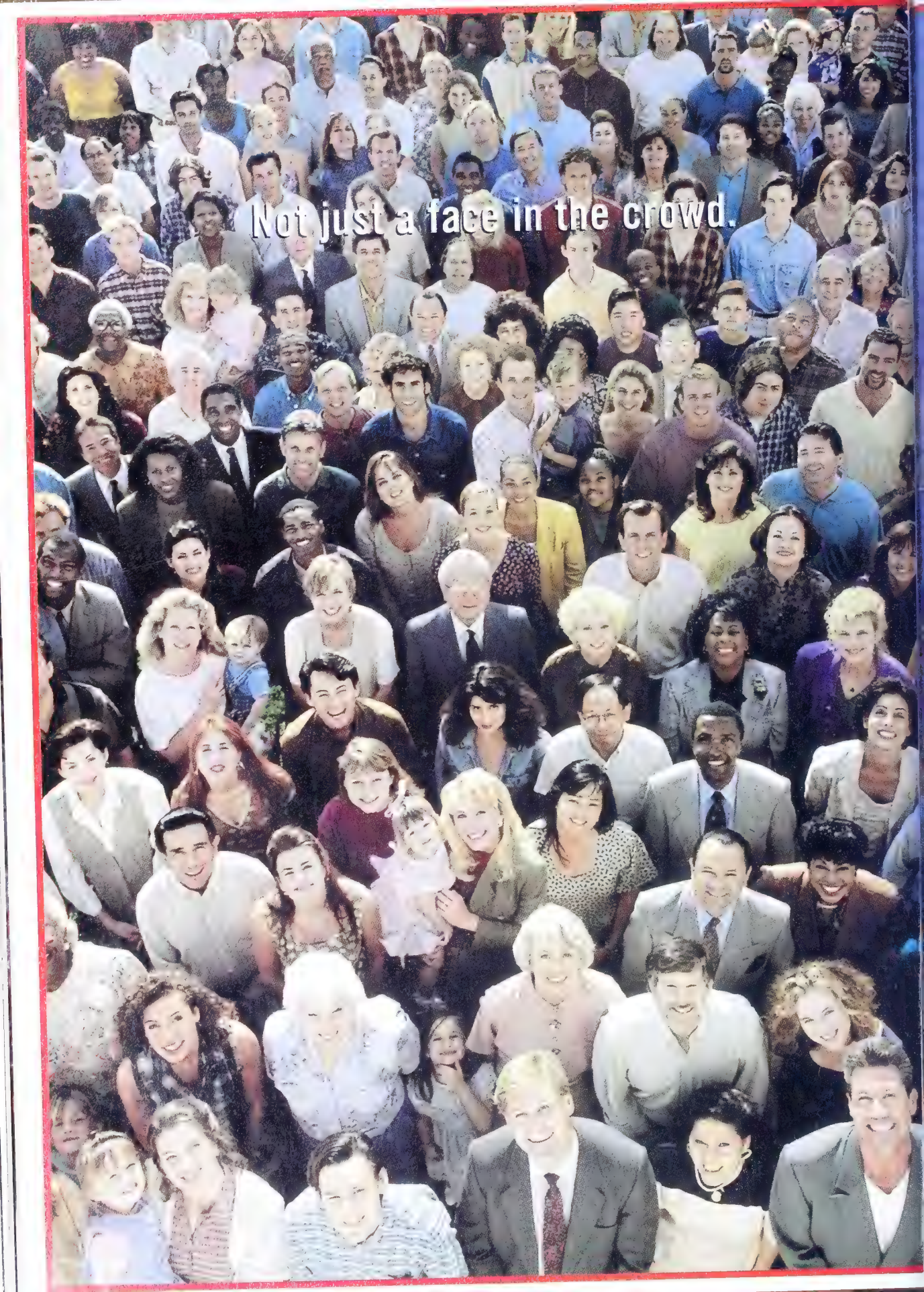


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A large, dense crowd of people of various ages, ethnicities, and genders, all smiling and looking towards the camera. The people are packed closely together, filling the entire frame. The text "Not just a face in the crowd." is overlaid in the upper-middle section of the image.

Not just a face in the crowd.

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Marketing

PUBLISHING

THE GOSPEL ACCORDING TO STEPHEN KING?

The King James Bible, with celebrity intros, is getting hot pres

The latest buzz in British book circles is an ancient text with all the trappings of a modern best-seller. Although copies have been in bookstores just one month, the publication has already garnered much press attention and the threat of a blasphemy charge. And it's coming to U.S. bookstores this spring.

The surprise hit? The Authorized King James Version of the Bible. Pocket-size editions of the Bible's individual books, introduced by celebrity writers, to be exact. Thanks to creative marketing that was masterminded by 29-year-old Jamie E. Byng, managing director of tiny Canongate Books Ltd., the "Pocket Canons" have gone back for a second print run in Britain, bringing the total copies in print to 900,000. The success of the series persuaded publishing heavyweights in 14 countries, including the U.S., Germany, and Japan, to snap up the rights quickly. "It's a remarkable project," says Morgan Entrekin, publisher of Grove/Atlantic Inc., the New York publishing company that will bring it out in the U.S. "I think it will get a tremendous amount of attention."

IMPULSE BUY. Not bad for a book that has been around for nearly 2,000 years—or for a 12-person Scottish publisher that was pulled out of bankruptcy four years ago. Canongate's flash of insight was to take the 400-year-old translation and package it in secular marketing garb—from snazzy promotional displays to arresting cover art and high-profile media events—usually reserved for novels. Canongate broke the Bible into its 66 books and produced 12 of them in slim paperbacks. In Britain, where they were launched on Oct. 1, they cost just one pound (\$1.70) each—

In its vile obscurantism is its baneful effect; the original language may have welded the metaphoric with the signified, the logos with the flesh, but in the King James version the text is a Guignol of tedium, a portentous horror film.

INTRODUCTION TO REVELATION
by Will Self



designed to draw impulse buyers. The publisher added striking black-and-white cover art and arranged the text in prose, modernizing the format of the verses.

But what really sets the Pocket Canons apart are the prefaces, penned by a wide range of thinkers and celebrities—Australian rock star Nick Cave on *Mark*, feminist writer Doris Lessing on *Ecclesiastes*, and atheist and evolutionist Steven Rose on *Genesis*. *Revelation* is introduced by British bad-boy author Will Self, whose exploits include getting caught snorting heroin on a campaign trip for former Prime Minister John Major last year. Self describes *Revelation* as a "sick text" that appeals to nut cases. It's the best-seller of the series. Even more controversial is novelist Louis de Bernieres' views on *Job*. The author of British best-seller *Captain Corelli's Mandolin*, a dark comedy, refers to God as a "sarcastic megalomaniac" and a "frivolous trickster." Byng insists he didn't set out to generate controversy. But he knew he

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Marketing

to do something to bring in a general audience, not just those drawn to religious books. "We wanted to make people look at the Bible with fresh eyes," he says. And he admits the ruckus over the incendiary intros has been "totally welcome." Indeed, they have helped Canongate stretch a \$3,500 advertising budget into a literary happening. Byng, the son of the Earl of Strafford and stepson of BBC Chairman Sir Christopher Bland, built a marketing campaign around the celebrity presenters. It included readings on the BBC, serializations in national newspapers, and a CD featuring several of the introducers reading from their works.

Just as important, the intros have set off a storm of protest from those who prefer their scripture traditional. Religious booksellers and activists have tried to block publication, and at least one threatened to sue for blasphemy. Paul J. Slennett, a wholesaler who owns three religious bookshops and heads the evangelical charity Jesus Is Alive! Ministries was so "horrified" by the introductions that he wrote protest letters to 18,500 clergymen, as well as to the Scottish Bible Board, which had licensed Canongate to reprint the King James version. **CANON FODDER.** The campaign to suppress the Pocket Canons didn't work, but it did generate widespread press coverage. Mainstream booksellers say their customers began asking for the books months before publication. Prospects look bright for Christmas. Several big retailers are planning to feature the Pocket Canons in December. Others will place all 12 books near sales registers—as last-minute stocking-stuffers. "This level of interest in a religious book is extremely rare," says Martin A. Jenkins, until recently a buyer

The Song of Songs is a cry of erotic longing and a description of erotic bliss. It is a lyrical drama whose speakers and episodes run into each other as in a dream or a vision.

INTRODUCTION TO SONG OF SOLOMON

by A.S. Byatt

How quickly the early church under Paul's tuition ceases to be visionary and turns respectable. How short are the days of miracle and wonder. Believe, behave! Consult, unite! We're under threat here, and how many divisions did the intellectuals ever have?

INTRODUCTION TO CORINTHIANS

by Fay Weldon

at Waterstones on London's Charing Cross Road, the heart of book country. The

Pocket Canons "are broadening the market for Bible purchasing."

Will that happen worldwide? The U.S. will be the series' next proving ground. Grove/Atlantic, the publisher of last year's Pulitzer Prize-winning novel *Cold Mountain*, bought the U.S. rights for an undisclosed amount. Sales will be pitching the Pocket Canons to bookstore chains this month. Grove is commissioning several new introductions by American writers—as yet undisclosed. About half of the British prices will stay. "It's going to be interesting to see how the Religious Right reacts," Entekin says. "I hope they appreciate it as a celebration of this glorious text."

Given the fracas so far, that's unlikely. But as in Britain, publishing experts in the U.S. think a little heat will draw general readers—particularly given their interest in spiritual texts such as *The Celestine Prophecy*. "They'll be getting the market that is curious but at the same time wants to thumb its nose at the Establishment," says Constance Sayre, director of Market Partners International Inc., New York publishing consultants.

Meanwhile, tiny Canongate is pressing ahead. Two more books are scheduled for release next year. So far, the biggest name among preface writers is Bono, lead singer of musical group

The Irish rock star, better known for packing stadiums than pondering the nature of God, will give his interpretation of *The Book of Psalms*. Canongate's *Lamentations* be far behind?

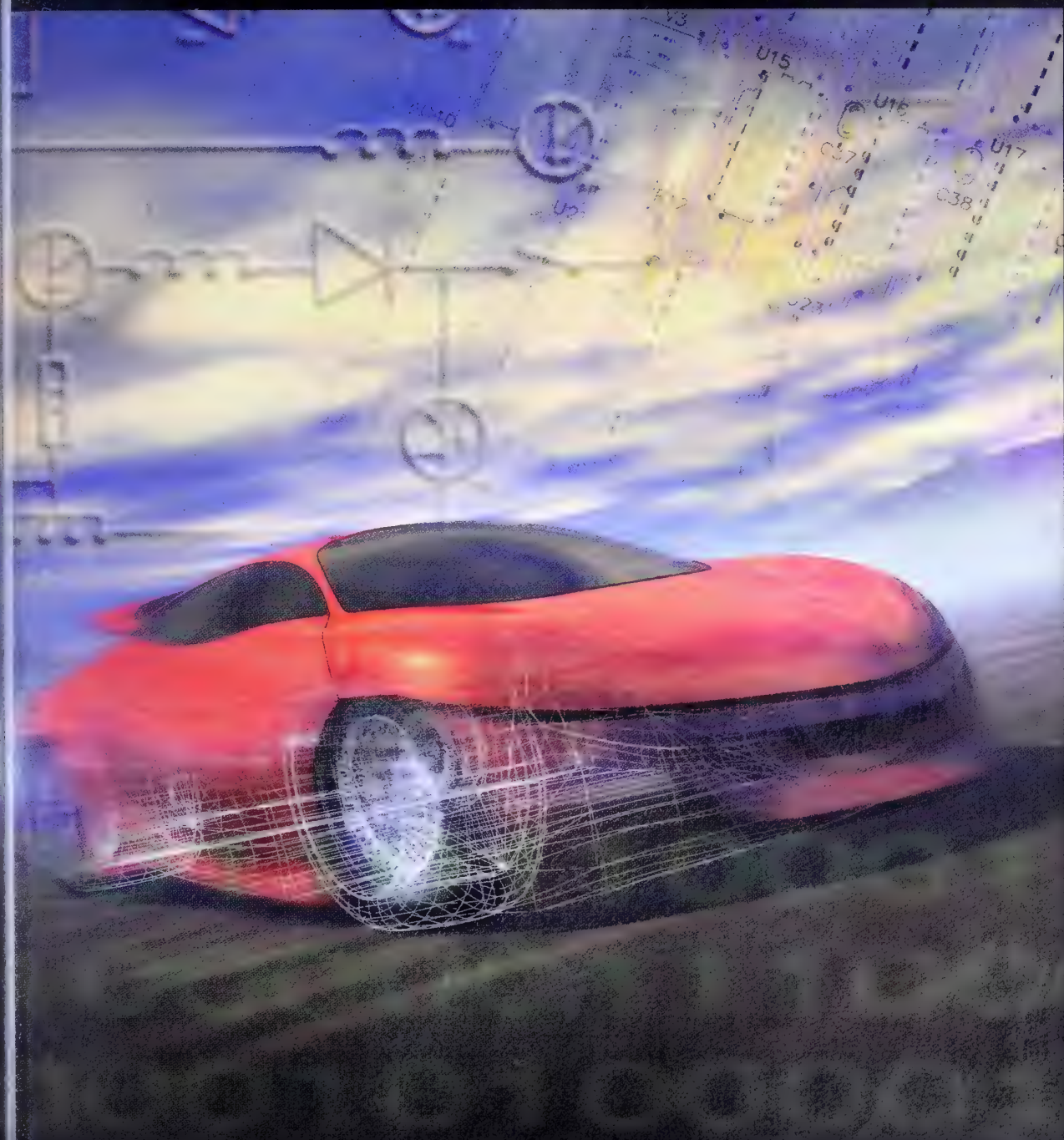
By Julia Flynn in London, and Ellen Neuborne in New York



SPECIAL ADVERTISING SECTION

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TECHNOLOGY FOR THE NEW MILLENNIUM



EXTRAORDINARY IN TWO AREAS WE CONSIDER FAIRLY IMPORTANT:
STOPPING AND GOING.



In a scant 6.7 seconds,* you're at 60 mph.

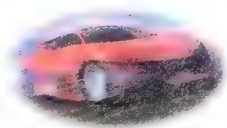
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TECHNOLOGY FOR THE NEW MILLENNIUM

OUR CARS ARE GETTING SMARTER. IT'S HAPPENING UNDER THE HOOD, INSIDE THE PASSENGER COMPARTMENT, AND EVEN ON THE ROADS WE USE. THE PAYOFF FOR CONSUMERS IS A NEW ERA IN SAFER, CLEANER, AND MORE CONVENIENT PERSONAL TRANSPORTATION.

What's driving this wave in automotive innovation? Credit low-cost computing power and a fiercely competitive world marketplace where a vehicle's new features often spell the difference between "just looking" and "I'll take it!"

The breadth of these technological wonders is astounding. From run-flat tires and cleaner fuels to anti-swerve suspensions and smart traffic signals, they truly cover the gamut of the motoring experience. They also represent the best thinking not just of the car companies themselves but of the thousands of suppliers to the transportation industry as well.

Some "smart" innovations, such as in-car navigational aids, are easy to recognize. But just as many more work unnoticed and behind the scenes to get you where you're going more efficiently. Example: Extensive multiplexing in the new Volvo S80 slashes by 88% the wiring required to make the instrument panel work.

Innovative thinking is nothing new in the automobile business, of course. But it's

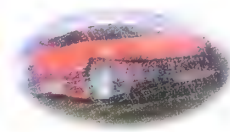
picking up steam as manufacturers and their suppliers strive for new ways to make their products more distinctive and attractive to consumers.

ELECTRONICS GALORE

The trend toward smarter cars reflects an ever-growing sophistication in the way cars and trucks are designed and built. It also tracks the accelerating adoption of powerful but low-cost electronics. Computer devices of various types so permeate the industry's products today that the computing power aboard a modern, well-equipped car has been compared to that of a desktop PC.

It wasn't always so. Cars have carried some electronics—radios, for example—for many decades. But most of today's routine applications for automotive electronics began less than 25 years ago. That's why tightening emission standards imposed performance requirements that simply could not be achieved with mechanical devices.

The result was an alliance between the electronics and automotive industries



SMART CARS

continues to bring new capabilities to cars and trucks.

Just-introduced examples include night vision, bumper-mounted sonar systems that make parking easier, services that can analyze a car's trouble via satellite, and "drive-by-wire" accelerators that relay pedal position electronically rather than mechanically.

OTHER INNOVATIONS

Automotive innovation goes well beyond the world of gee-whiz electronics, however. You'll find plenty of new ideas popping up in lighting, seating, tires, fuels, and materials, too. There are tail lights that promote safety by lighting up quicker, headrests that mechanically swing into position in a crash to help avoid whiplash, seats that grip better and last longer, and seats that are air conditioned or which massage your back.

New ideas are helping make our streets and highways smarter as well. You've probably seen those signs that give you live updates on traffic conditions ahead. But what about smart signs that can display messages in a window on your windshield

well before you spot the sign itself? Or systems that tell you where the road is in heavy fog or snow? 3M's Intelligent Transportation Systems Project is among those probing such technologies.

Automotive developers are cooking up fresh ideas so quickly these days, it's almost impossible for consumers to keep track of them all. Here's a rundown on some of the industry's most intriguing innovations.

SMARTER PACKAGING

Simply adding new features to a car willy-nilly can quickly bloat construction costs. That's why manufacturers are intrigued by better ways to integrate features and build major automotive components as plug-in modules that speed the assembly process.

It's been going on in seating for several years. Automotive assembly plants routinely receive their seats built to order on a just-in-time basis from outside suppliers. It won't be long before many factories get entire interiors that way.

The same concept works for other big modules, too. In Brazil, for example, Dana Corp. collects components from 70 sub-

Volvo's new S80 is an international luxury class car with backup radar, stability control system, front and side airbags, antitheft immobilizer system, a smog-eating radiator, and 17 on-board computers linked by a simplified multiplex wiring network.



SMART CARS

Dana Corp. supplies Chrysler's Dakota pickup truck plant in Brazil with 17 versions of this ready-to-roll chassis.



The display of this prototype electronic instrument cluster from Robert Bosch can be programmed by an automaker to change its look or content to suit both the customer and the needs of a specific model or market.



PERSONALIZED ELECTRONICS

What kind of feature really catches a car shopper's eye? Often, the answer today is "something electronic"—a gadget that isn't always essential but which certainly makes driving more convenient. A proposed electronic dashboard from Stuttgart-based Robert Bosch GmbH that might let you rearrange the display to suit your mood is a good example.

Trip computers and electronic compasses also fall into this category. So do power seats that remember multiple settings for different drivers. Radios that can display a station's call letters and format are another example. The same goes for semiautomatic transmissions that let you row your own gears if you wish or not if you prefer to have it done automatically. These features began to appear on the automotive scene several years ago and are now spreading to more models.

For automakers, success lies not in the technology or hardware, but what it offers consumers. When buyers see a value, the





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A car without Bosch.

Imagine for a moment that your car doesn't have a starter motor, fuel injection or an ignition system. Imagine driving without a control system for your airbag. In fact, imagine your car stripped of everything Bosch. So no oxygen sensor or spark plugs. No windshield wipers, alternator or ABS. Forget the traction control system and even your Blaupunkt radio. So what's left? Nothing. At least nothing you could drive. Though you could try pedaling.

We bring innovation



BOSCH

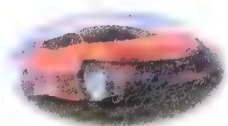


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SMART CARS

gladly pay the price. A case in point: Some commuters are buying a transponder to put in their vehicle that lets them pay tolls automatically without stopping. The device links by radio to a roadside antenna, deducting the correct amount from drivers' prepaid account as they whiz by.

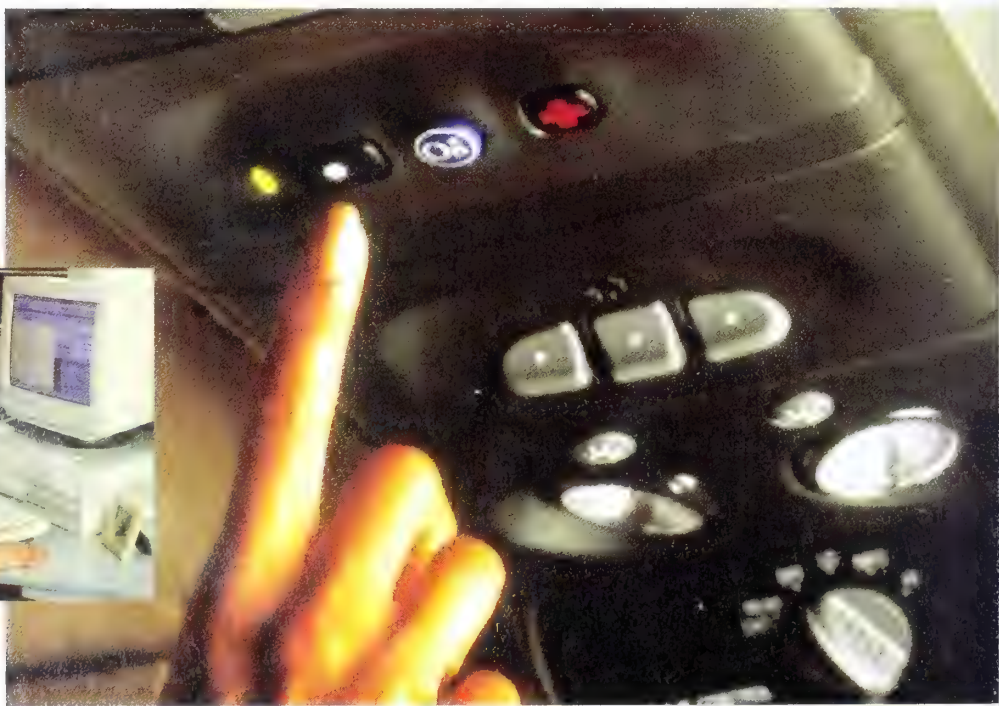
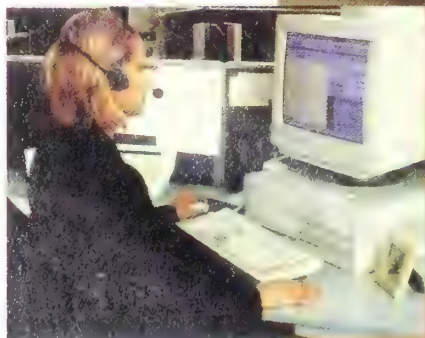
PUSH BUTTON CONVENIENCE

You know about power seats that remember the favorite sets of adjustments for two or three drivers. How about a brainier system that also remembers your preferred steering wheel tilt angle, radio station presets, mirror adjustments, suspension firmness, and more? You can get one in the 1999 Lincoln Continental and Town Car.

Will drivers be willing to buy the capability of adjusting their car's radio, temperature controls, and cellular phone by talking to them? Visteon Automotive Systems, an enterprise of Ford Motor Co., is among those with the necessary voice-activation technology ready to go right now.

OnStar, from GM's Delphi Automotive Systems subsidiary, is a safety, security, and information system.

It combines global positioning satellite and cellular technologies to link a vehicle and its driver to the OnStar Center where advisors are available 24-hours-a-day to offer real-time, personalized help.



If you're ready for the next phase in remote garage door openers, consider HomeLink, an electronic transceiver that can activate your garage door, estate gates, home security system, outdoor lighting, and more. Supplied by Johnson Controls, Inc., HomeLink has already been built into 3.5 million vehicles from several manufacturers. This fall, Ford debuts a companion gadget called TravelNote. It's a built-in digital voice recorder that lets you record brief messages and reminders while you're driving.

WHERE AM I?

Navigational aids, a big hit in Japan for several years now, are starting to catch on in the United States. Many Americans are getting their first exposure to these handy devices in rental cars, where they are especially effective in helping you get to your hotel or meeting site quickly and without wrong turns.

Typically, your progress is indicated on a video map display as driving instructions are announced aurally, although directions may be displayed more simply in terms of h

Help them plan a trip to Arizona.

*Call them when their air bags went off.
(Their car sent a signal to OnStar.®)*

*Make sure they were all right
(They slid into a nest of rattlesnakes.)*

Wherever Frank and Shirley went, OnStar was sure to _____.

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*Check their engine by remote.
(From 1,000 miles away.)*

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Order a tow truck.

Get them a cab to the hotel.

*Notify their insurance carrier.
(At Shirley's request.)*

Suggest a great Mexican restaurant.

*Get them to I-40.
(After Frank got lost.)*

Get them tickets to a baseball game.

Find the nearest gas station

Warn them about road detours.

*Call when their car was stolen
(And help the police track it.)*

Contact them after the car was recovered.

*Unlock their car doors by remote.
(Frank locked the keys in the car.)*

Tell them Tucson will be sunny and 86°

How will you use it?

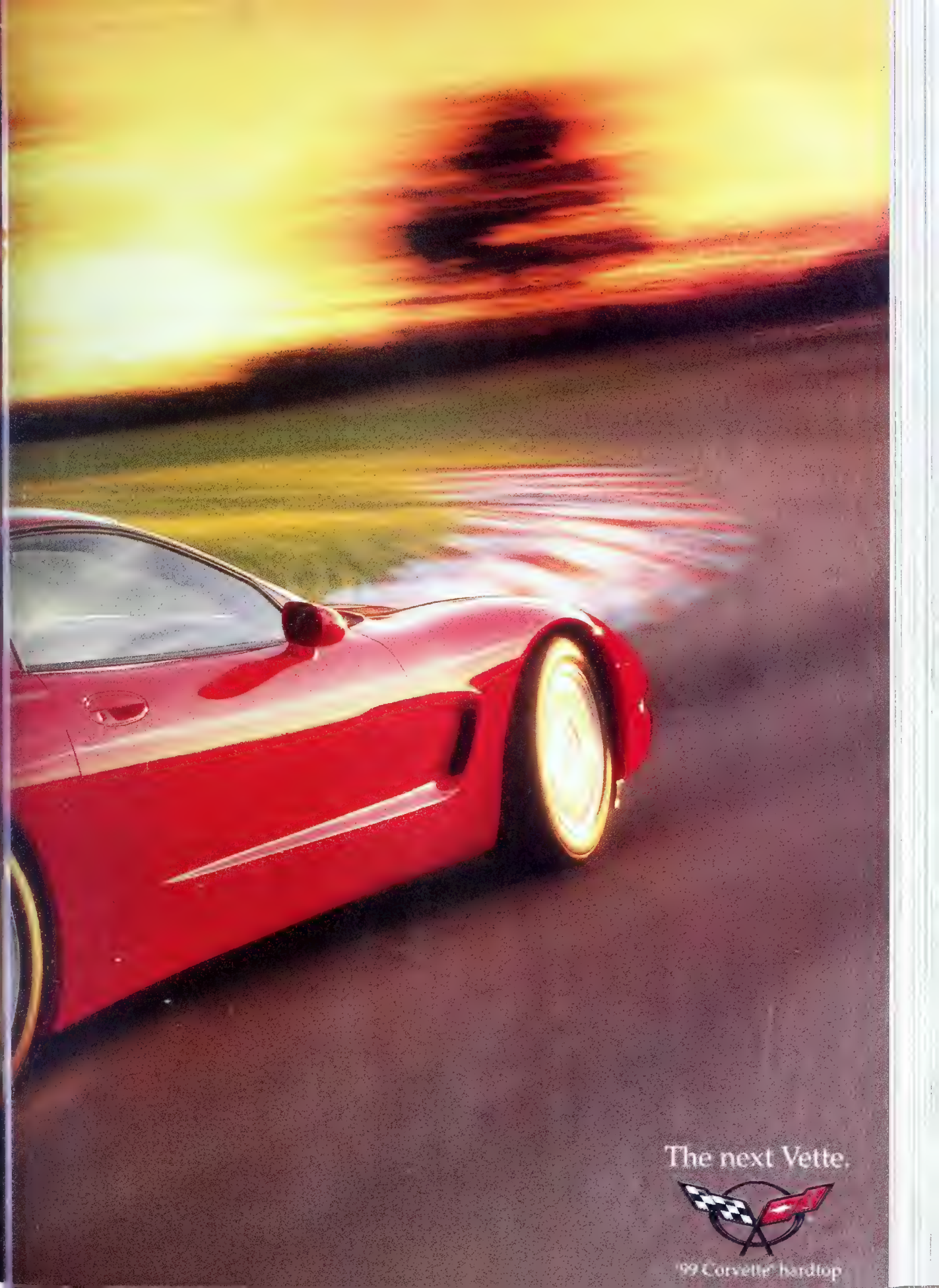


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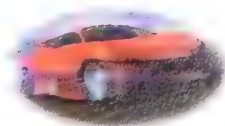




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'99 Corvette hardtop



SMART CARS

far it is to the next left or right turn. Such systems keep track of where you are by comparing your rate of speed and angle of turns against their internal maps, by triangulating your position with the aid of global position satellites, or both.

If that sounds too technical, there are more gentle alternatives. OnStar from GM's Delphi Automotive Systems subsidiary is a mobile concierge service available in many GM products that connects you with a live service representative 24-hours-a-day. Your OnStar representative can order theater tickets, find you a hotel, remotely troubleshoot many car troubles from afar, and even unlock your doors if you lock your keys in your vehicle. The system also will automatically summon emergency help if you're in an accident severe enough to trigger your vehicle's airbags.

Ford customers can opt for RESCU—short for Remote Emergency Satellite Cellular Unit—a somewhat similar system that reports your location in an emergency and lets you talk to a live person via cell phone until help arrives. Like OnStar, RESCU can dispatch a tow truck if you need one.

Cadillac Night Vision uses thermal imaging to display potentially dangerous conditions well before your headlights pick them up. Debuting in 2000, the system can see through fog and the glare of oncoming traffic.

HEADS UP!

Driving down a country road at night, your vision is only as good as the reach of your headlights. In about a year, however, you'll be able to overcome such limitations. That's what Cadillac expects to introduce Night Vision, an infrared detection system that can spot objects up to three times farther away than they can be seen with high-beam headlights.

Cadillac's thermal imaging system uses a small sensor mounted in the grille and a translucent display on the windshield. Heat generated by objects makes them appear as ghostly white images floating near the front of the hood. The system works through fog or rain, and it helps you see ahead through the headlight glare of oncoming traffic.

Night Vision will debut as an exclusive option on the 2000 Cadillac DeVille and will spread to other GM models later.

AUDIO NEWS

If you've ever taken a long driving trip with teenagers, you know there can be major differences of opinion over music selection. But dual media audio systems offer a way



The power to simplify:

**Sometimes, it means inventing new ways
to keep you in touch as you travel.**



Delphi Automotive Systems is leading the way in bringing satellite communications into the car you drive. Our Mobile Media System will deliver E-mail, provide directions, let you order a movie, play a game and more, all through your car's computer. Developed in combination with IBM®, Netscape® and Sun Microsystems®, many of these advanced features are already being designed into vehicles you will be driving in the coming years. By developing the smart systems of tomorrow, Delphi is uniquely positioned to meet the needs of auto manufacturers around the world. To learn more about how we simplify things for car and truck makers, visit www.delphiauto.com.

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find peace for all parties. They supply separate signals from two audio sources simultaneously, so you can listen to talk radio while your kids enjoy their Smashing Pumpkins CD with their own set of volume and seek controls operating through headphones plugged into dual backseat jacks.

When a customized music channel isn't enough for your backseat passengers, why not consider movies or video games you display on a flat-screen display that flips down from the ceiling of your minivan?

Oldsmobile's top-end Silhouette Premiere minivan comes with an integrated sound system that includes a 5.5-inch color screen and two headphones each for second- and third-row passengers. You can use the system to watch video tapes, including those you shoot with your own video camera, or listen to CDs or audio tapes. The system is flexible enough so front-seat passengers can listen to one audio source while backseat passengers tune into another.

There are handy new audio electronics for the driver, too. One is speed-sensitive volume that changes automatically to offset

road noise at higher driving speeds, the dials down when you slow. Another is the Radio Data System feature which displays the radio station's call letters, music format, song title, artist, or other information such as traffic reports or even stock quotes. The data is transmitted along with the normal audio signal broadcast by the station. Yet another idea: speakers mounted in the headliner that lend new meaning to the term "surround sound."

SAFETY

Safety plays a varying role in the purchase decision, but most consumers consider it very important these days. The 1999 crop of new vehicles boasts a number of new safety features worth your consideration. Even more advanced safety items are scheduled for introduction over the next several years.

Just how far safety technology can go is demonstrated in prototype vehicles such as Toyota's Advanced Safety Vehicle. It's equipped with a hood airbag for pedestrians, side-mounted cameras in the front fenders,

The Silhouette Premiere minivan from Oldsmobile features an integrated video entertainment system. While mom and dad enjoy listening to their favorite talk radio or CD, the kids in back can watch a tape of their favorite movie on a flip-down video screen.





SMART CARS

Toyota's experimental Advanced Safety Vehicle carries almost every conceivable safety feature, including a system that pulls your car to a stop on the side of the road and turns on the emergency flashers if you fall asleep at the wheel.



I can see cross traffic as you peek out of a row alley, a fire suppression system for the engine compartment, a drowsy driver alert, and an automatic accident avoidance system.

GENTLER AIRBAGS

Airbags haven't lived up to the cure-all safety reputation they once had. To be sure, the devices deserve credit for saving thousands of lives. But their explosively fast inflation rate also has been blamed for injuring or killing occupants who were sitting too close to them when they deployed.

Until the 1998 model year, the airbags were engineered to meet federal safety regulations requiring them to protect an unbelted adult male in a 30-mile-per-hour frontal crash into a barrier. Modified test standards now permit airbags that deploy with up to 35% less force.

These gentler airbags still inflate faster than the eye can see—they must if they are to provide protection in time. Virtually all 1999 cars and trucks are equipped with some form of these less forceful airbag systems. A number of automakers are introducing two-stage



airbag systems that are smart enough to inflate with less force at lower crash speeds.

Many 1999 models come with side airbags as well. Mounted in the doors or outer edge of the front seats, they pop out to protect your torso in a side impact.

That's not all. Manufacturers such as BMW, Mercedes-Benz, Toyota, and Volvo are adding a second set of airbags—shaped like tubes or curtains—that block the side windows to protect your head and keep you inside your vehicle when you're hit from the side. Developers have even come up with small footwell airbags to protect your feet in a crash.

Curtain-like side airbags in the 1999 E-Class Mercedes-Benz sedan work in conjunction with existing door-mounted side airbags to help prevent head injuries in a severe side collision.



SMART CARS

Still smarter airbags are expected a few years from now. They will determine the weight and location of each passenger, check for seatbelt usage, and note the speed of the vehicle in deciding how much force to use in deploying. The hardware for such systems exists today, but developers are still working on computer software that can accurately make the necessary calculations in a split second.

SMART TIRES

Even the tires on your car are beginning to get smarter. Continental General Tire is developing a technology that lets tires "read" the road as they roll along, relaying the information to a special suspension that responds to changing road conditions and driving styles accordingly.

The Continental system imbeds magnetic bands in a tire's sidewall, then uses a pair of sensors to read their movement. The result is a stream of data about tire loads that could be fed into antilock brake and active suspension systems to improve their performance.

Modern tires make blow-outs less likely. But if you're still worried about

getting a flat, look into the new and growing breed of run-flat tires. Run-flat technology isn't new, but marrying it successfully to conventional tire rims has taken time. You'll find run-flat tires in sizes to fit most cars and minivans. They look like conventional tires on the outside, but their sidewalls are stiffer so the tire won't collapse when it loses air. The tires are so effective at maintaining their handling characteristics after a puncture that run-flats generally require special sensors to warn you when they lose air.

Even tires with no built-in brains are more competent than previous-generation run-flats. The trend is to superior performance and greater durability under a broad range of driving conditions. Most tires on new American cars today have all-season capabilities, for example. And high-performance tires are beginning to match the longer tread life that more sedate tires achieved years ago. Some are adopting tread patterns originally developed for weather racing tires, a feature that helps avoid aquaplaning—the skid-prone condition that occurs in rainy weather when a tire can't squeegee away water fast enough.

The Chevrolet Corvette carries no jack or spare tire because its Goodyear Eagle F1 EMT (Extended Mobility Tires) can be driven safely, even with a total loss of pressure, up to 50 miles at 55 mph. Run-flat tire technology is becoming available now for most cars and vans.





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is bound to
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It's called our Hybrid System. The world's first system that combines a gasoline engine with an electric motor to maximize fuel economy, eliminate battery charging facilities, and reduce exhaust emissions by a staggering 90%. Which gives us a lot of breathing room while we continue to work on the remaining 10.



The Prius: Our new hybrid vehicle is currently in Japan but coming to America soon.

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 SMART CARS

LIGHTS ON FOR SAFETY

Should your headlights be on during the day? Many safety experts think so. Research is inconclusive on the issue, but the idea of using your headlights to make your vehicle more noticeable to other drivers during the day certainly appeals to common sense.

Daytime running lights (DRLs) are required on new cars sold in Canada and Scandinavian countries. There's no rule about it in the United States so far, but several brands offer this feature anyway, including GM, Saab, Volvo, and Toyota.

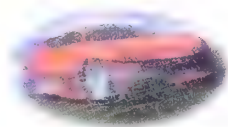
A SMARTER DUMMY

How effective are airbags, seat belts, and other automotive safety items? Ask a dummy.

For years, key safety performance information has come from Hybrid III, a crash dummy developed by GM. Hybrid IIIs have been riding out and reporting the effects of frontal, side, and rollover crashes for years.

Now a more intelligent dummy, Thor, is preparing to take over early in the 21st century. Built to mimic the behavior of the human body more accurately than its predecessor, Thor promises to give researchers a clearer picture of the forces affecting the body during a crash. The new dummy features 120 built-in pressure sensors, about twice as many as a typical Hybrid III has. It is also configured to measure forces generated by seat belts, airbags, and other safety systems that were still in their automotive infancy when Hybrid III was designed.





SMART CARS

SUSPENSIONS THAT THINK

Our car's suspension waits until you hit a bump, then reacts by trying to minimize the jolt. But one day it will "read" the road ahead, then adjust itself before the bump arrives so you can enjoy a boulevard ride and sports car handling at the same time.

In their most advanced form, these active suspensions require no springs or shock absorbers. None is in mass production, though, because of the high cost of the sensors, high-pressure hydraulics, lightning-fast actuators, and high-tech computers necessary to make it all work.

In the meantime, you can buy some cars that use their antilock braking and traction control systems to help prevent skids. Lexus Vehicle Skid Control, for example, will dial

back engine power and apply braking to individual wheels as necessary when the direction of vehicle travel does not agree with driver steering input. Other luxury cars—notably those from Audi, BMW, Cadillac, and Mercedes-Benz—offer similar systems. Bosch is credited with developing the first skid control system four years ago.

Other manufacturers offer adaptive transmissions that shift sedately or aggressively according to how you use the accelerator. Some can adjust their shock absorbers automatically as road conditions change.

Another technology you'll hear more about in the next few years is adaptive cruise control. It uses radar to check on the car ahead, adjusting your speed automatically when traffic slows or someone pulls in



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ENGINE

OFF-HIGHWAY

INDUSTRIAL

LEASING

SMART CARS

The 1999 Lexus ES 300 is an entry-level luxury car with standard antilock brakes and electronic traction control—and an optional vehicle skid control system that uses elements of both.



ahead of you so you don't have to repeatedly engage and disengage the system.

Eaton Corp. introduced its version of this technology, called SmartCruise, to the heavy-duty truck market in June. The system works in concert with a collision avoidance warning system called Vorad that Eaton debuted for big trucks four years ago. Carmakers are evaluating an automotive version of SmartCruise now.

ENVIRONMENT

If you think concern about the car and the environment was just a '60s thing, think again. Automakers are preparing for another worldwide wave of government regulations that could result in a whole new era of super-efficient cars and trucks.

William Clay Ford Jr., who becomes chairman of Ford in January, predicts a wave of environmentalism that will "swell to undreamed-of heights" in the 21st century. He believes that smart automakers will prosper by anticipating the trend with cleaner vehicles.

The new environmental push is being driven largely by concerns about global

warming caused by rising levels of carbon dioxide in the atmosphere. Not all scientists agree global warming is real, but every major car company is developing alternate power plants to address the emissions issue anyway.

CLEANER ENGINES

This fall a big share of new gasoline-powered cars and trucks will qualify as low-emission vehicles (LEVs). That means they will emit only about half as much smog-forming hydrocarbons as are permitted by U.S. Environmental Protection Agency regulations. One benefit is that LEV-certified sport utilities and big pickups are about as clean as most passenger cars currently on the road. Even cleaner models, known as ultra-low-emission vehicles, ULEVs, will debut in the next year or two.

Much of the impetus for getting ahead of federally required emission standards was sparked in the mid-1990s by the California Resources Board (CARB). CARB announced standards that, by 2003, would require 10% of all vehicles sold in California by each manufacturer to emit essentially no pollution at all. Electric power was the only way to run these zero-emission vehicles, or ZEVs.

CARB has since eased its standards. But then its initial announcement had triggered a chain of events that is putting millions of LEV-certified gasoline-powered cars and trucks on the road—and speeding the introduction of more exotic vehicles.

FUEL CELLS

Even more advanced alternative is to power an electric vehicle with fuel cells. They produce electricity from hydrogen and oxygen and, in tests to date, are about twice as efficient as the venerable internal combustion engine. But they also suffer from high cost, various packaging challenges, and the problem of refueling with hydrogen. Fuel cells are still attractive technology, however, because they are reusable and have the limited range of batteries.

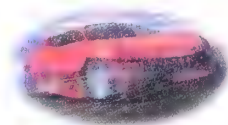
Ford, Daimler-Benz, and Ballard Power Systems have formed a new company, Ballard Electric Drive Systems Co., to commercialize automotive fuel cells by 2004. Other carmakers say they'll be ready with their own fuel cells at about the same time if consumers show interest in the technology.

HYBRIDS

These days automakers are especially intrigued by hybrid power systems—those that combine an electric motor, electrical generator, batteries, and some form of internal combustion engine. Hybrids offer the best of both worlds: very low emission levels but with performance and range akin to current piston engine cars.

Late last year Toyota became the world's first automaker to put a hybrid into production. Its Prius (pronounced PREE-us), priced at about \$17,000, has been selling briskly in Japan ever since. The little four-door—which offers the interior roominess of the Toyota Camry in a body shorter than the company's Corolla—is heading for U.S. and European markets in about 18 months.

Prius gets twice the mileage of a conventional car with automatic transmission and produces one-tenth the emissions allowed by Japanese standards. Toyota says a peppier U.S. version will do even better, delivering about 60 miles-per-gallon and meeting California's "super ultra-low emission vehicle" standard. The Americanized Prius is expected to cost between \$18,000 and \$22,000.



SMART CARS



Ford's big F-250 pickup truck passes California's Low Emission Vehicle standard, making it as clean as most cars on the road today.

Dominating the field.

From day one, Ford Explorer has been the leader of the herd.* This year, the new Explorer will go further out front by adding optional side-impact airbags** and a Reverse Sensing System to an already long list of standard features. Plus, as a Low Emissions Vehicle, the new Explorer actually runs cleaner than most passenger cars on the road today. Ford Explorer.

The most evolved species out there.



*Outsold competitors from October 1, 1991 through July 31, 1998. **Always wear your safety belt and secure children in the rear seat
†'99 Explorer XL MSRP, Eddie Bauer model shown \$34,385 MSRP; tax, title extra.



New 1999 Ford Explorer

Four-door starting at \$23,495[†]

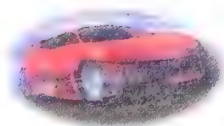
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SMART CARS

Toyota's hybrid Prius links a small gasoline engine and an electric motor in a system that delivers about twice the fuel economy and one-tenth the emissions of a conventional car.



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SMART ROADS

We've heard about the smart roads of tomorrow for years. But now "intelligent highway" technology is inching into the mainstream. One reason is that the number of vehicles on the road is increasing far faster than our ability to add more roads or widen old ones. Consider these statistics from the Federal Highway Administration (FHA). Over the past 20 years, it says, we've built about 2% more streets and roads, but there are more than 50% more vehicles using them—and they travel 77% more miles.

The result is spreading congestion that is affecting broader metropolitan areas. Pending an unlikely swing away from personal vehicles, traffic planners figure the best solution is to manage traffic flow more efficiently.

That's where smart highways come in. A number of possible solutions were demonstrated last year during a big automated highway expo in San Diego. Among them is high-speed "platooning" in which a smart highway takes control of cars and moves them along, bumper-to-bumper, at 70 miles an hour.

Those technologies are years away from implementation. More immediate traffic

aids include "smart" traffic signals and roadside displays that give drivers instant updates on traffic conditions ahead.

The potential U.S. market for smart road technology is enormous. A study released two years ago by the U.S. Department of Transportation pegs it at some \$430 billion over the 20-year period from 1996 to 2016.

DRIVING SMARTER

There's no question that today's cars are more intelligent than ever. If the technology waiting in the wings is any indication, they'll be even smarter a few years from now. These new features will pamper passengers with new conveniences, protect them more effectively from harm, and minimize the impact of their vehicle on the environment.

No matter how intelligent cars and roads get, however, an old truism about driving remains as valid as ever. It says the most important component in smart cars is the brain behind the wheel.



Bill Hampton has covered the automotive industry for national publications since 1970.



ATEGIES

HEY, IF IT WORKED FOR LORAL . . .

is thriving with insights from the defense star

Frank C. Lanza has sat at one desk or another at 600 Third Ave. in New York for the past 17 years. It was as president of Loral Corp., where Lanza helped the legendary Howard L. Schwartz turn a floundering, full-time conglomerate started in the 1950s into a \$7 billion defense power. When Loral was sold to Lockheed Martin Corp. in April, 1996, Lanza moved upstairs a couple of floors to serve as Lockheed executive vice-president. But in all those years, there was one place Lanza never occupied: the chief executive's. That changed in April, 1997, when Lanza talked Lockheed's CEO at the time, Norman R. Augustine, into letting him buy out 10 electronics manufacturing divisions from Lockheed, creating L-3 Communications Holdings. "The thing that did excite me most was being No. 1, finally," says Lanza.

"L-3 became my second chance. And I didn't think I'd get a second chance."

Two times seems to be a charm. Rather than easing into retirement, the 66-year-old Lanza now finds himself running one of the hottest companies in the market. Since its May 19 initial public offering, L-3 stock has climbed 73%, to a recent \$46 per share. Half of that gain has come in the past two weeks alone, buoyed by a 68% jump in third-quarter earnings. At a time when better-known defense stocks are flat or down, Lanza has maintained investors' faith. "There are very few people out there who are the real thing," says Richard Perry, whose investment firm owns 1.4 million shares, "and Frank Lanza is the real thing."

Schwartz's right-hand man for 15 years, Lanza is quickly stepping out of his mentor's shadow. But he's hardly

abandoning what he learned there. Staffed up with Loral graduates, Lanza hopes to build L-3 into a powerful new defense player through Loral-style acquisitions. He's also replicating the entrepreneurial operating style that made Loral a standout in the heavily bureaucratic industry—and on Wall Street. The formula clearly works: For the full year,

FULL PLATTER

CEO Lanza

owns six restaurants and plays a mean game of tennis

Merrill Lynch & Co. analyst Byron K. Callan expects earnings to soar 53%, to \$95 million. L-3's sales should well exceed \$1 billion, up from \$701 million last year.

Already, Lanza and President and Chief Financial Officer Robert V. LaPenta, another Loral alum, have established L-3 as an expert in two areas. One, specialized electronics, includes cockpit voice recorders and other devices sold to government and commercial customers. That and the second area, secure communications for military airborne, ground, and shipboard systems, are part of the fast-growing market for defense electronics, a market DFI International says will hit \$57 billion this year.

Lanza hopes to boost L-3 into a top-tier supplier to the three major prime contractors—Lockheed, Boeing, and Raytheon. "They're doing Loral all over again, but with a different business environment, where the opportunities are among small to midsize suppliers to the Big Three," explains Lior Bregman, CIBC Oppenheimer Corp.'s defense analyst. Bregman also points out that unlike Loral, L-3 is tackling commercial markets.

QUICK APPROVAL. Already close to retirement age by the time he got to Lockheed, Lanza had never lost his entrepreneurial itch. That made it hard to fit into the giant's slower-moving culture. "Loral was a hard act to follow," says Lanza, a straight talker who Schwartz says was so loyal to Loral he never once asked for a raise.

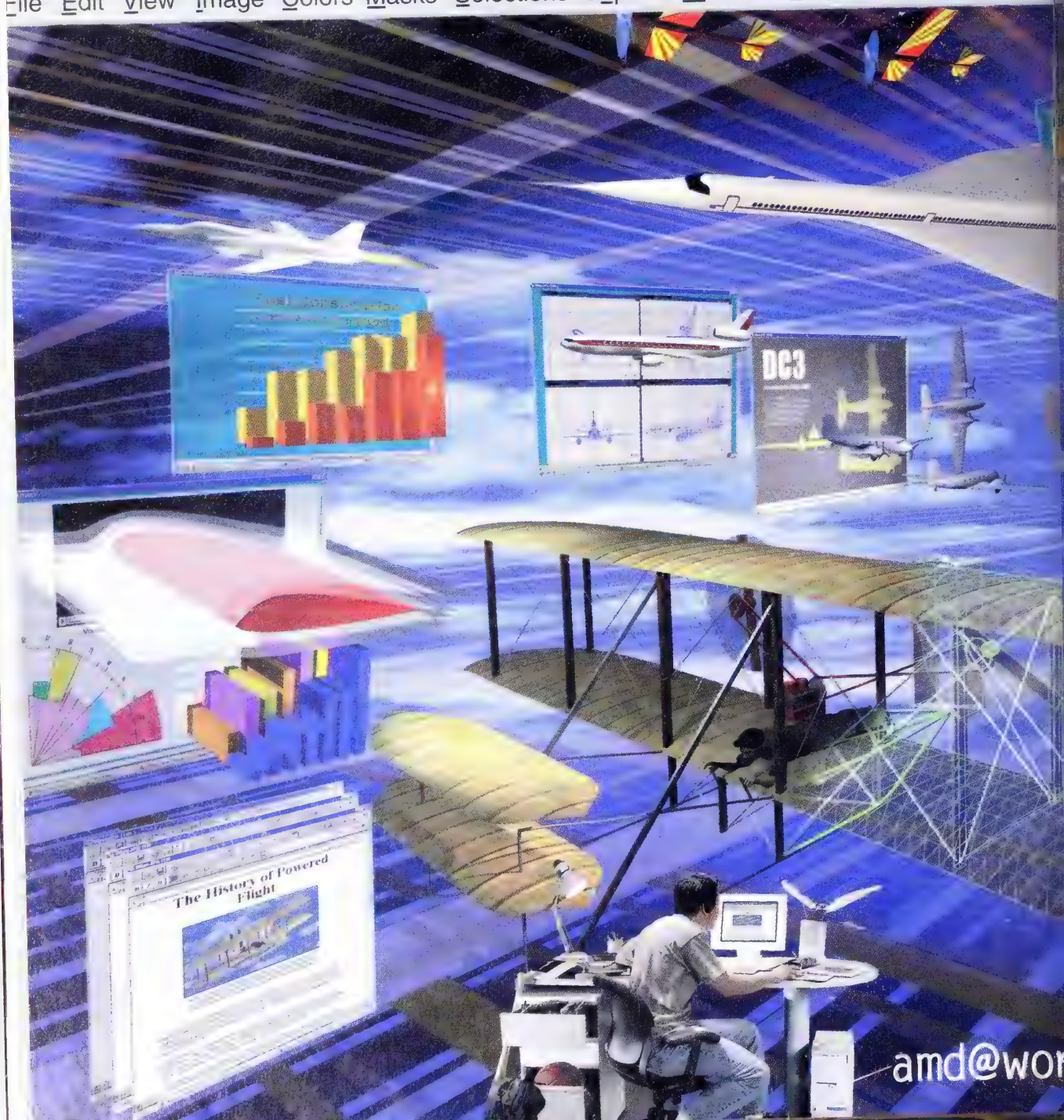
He got them anyway, of course, but Lanza believed so strongly in Loral that he initially lobbied against the merger with Lockheed. He reasoned Loral could one day rival the majors if it remained independent. But he finally bowed to the premium price Lockheed granted to Loral shareholders, even agreeing to Schwartz's request that he go to Lockheed and oversee the consolidation.

From there, he could easily have jumped with a golden parachute to the tennis courts, but within a year he was

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The Corporation

instead lobbying Augustine to part with the units he wanted to start L-3. "It took me less than half an hour to get a yes," says Lanza. "I said we can build a big company, and Norm agreed." Lockheed owns 25% of L-3.

To build the company, Lanza has recreated Loral's signature hands-off approach. He relies on weekly one- to two-page faxes from each division manager, then meets with them at least once every six weeks to keep up to date. In return, he regularly sends off handwritten notes on everything from industry rumors to strategic advice. "They say it's your business and you live and die by the sword. Good luck, and please call us for help," explains Steven Schorer, president of L-3's Ocean Systems business.

ORPHANS SOUGHT. Years of operating experience—and 25 deals done at Loral—give Lanza an edge when shopping for acquisitions, which takes about a third of his time. "He's just very, very savvy," says Schwartz, now CEO of satellite specialist Loral Space & Communications and the owner of 50,000 L-3 shares. Lanza sticks to clear acquisition

criteria. He buys technology leaders, either smaller independents finding it too costly to stay solo or isolated divisions of the defense giants that may not fit with a new parent's core operations after a merger. All purchases must add to L-3 earnings in a year or less. Lanza

Group, headed by former Defense Secretary Frank C. Carlucci, and Global Technology Partners, financed by Donaldson, Luffkin & Jenrette Inc. and run by ex-Pentagon leaders. "It's a lot tougher today than it was when Frank and Bernie Schwartz were first doing

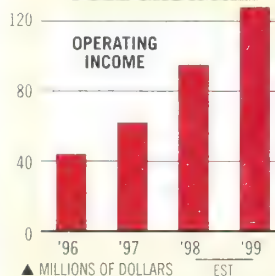
it," says Mark Ronald, head of Marconi North America, a billion-dollar division of Britain's General Electric Co. and sometimes an L-3 rival. "[Values] have doubled. That makes it a heck of a lot harder to get a good return."

So far, Lanza has made it look easy. A prodigious worker, he is industrious even during downtime. He's a competitive tennis player and spends many weekends working on the six restaurants he owns with his three sons. Lanza, who remembers

his career with lots of travel keeping him away from his kids, says running a business "brought our family together." Retirement from L-3, he insists, is at least 10 years away. "I grew up in this business," Lanza says. After taking so long to get to the top, he isn't in any hurry to step down.

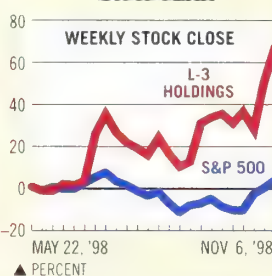
By Nanette Byrnes in New York

AS ACQUISITIONS FUEL GROWTH...



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...L-3'S STOCK IS ON A TEAR



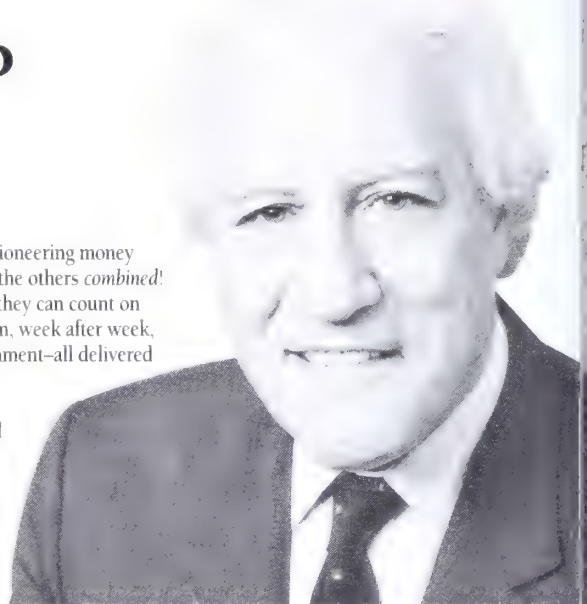
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Keep on Truckin'

GAB ROBINS' TRUCK CLAIMS EXPERTISE

HELPS TO CONTROL COST AND DOWNTIME

Truck claims adjusting requires a special kind of experience and know-how that regular automobile claims personnel simply don't have. John Ramsey, national product manager, truck and heavy equipment, at GAB Robins, talks about what it takes to get it right in this very distinct area of claims adjusting.

Q: How do truck claims differ from claims for regular automobiles?

A: The trucking claims business is unique, because trucking claims are all dealing with commercial vehicles. These trucks represent people's source of income, it is the way they make money. A person without their car for a period of time is inconvenienced. But a business without a truck is often out of business until that vehicle is back in service.

Q: Is there a way to handle these claims more effectively?

A: It all starts with getting a trained, experienced adjuster to assess the damage quickly—and our experts can be reached "24 and 7." Then, it is critical that the adjuster is knowledgeable about repair options and sources. Large commercial

rigs are highly customized pieces of equipment, so having experts who know what they are looking at gets the claim and repair process headed in the right direction. And the range of expertise needed is extensive. Our truck and heavy equipment specialists handle much more than over-the-road trucking claims—from construction equipment, including cranes, to specialized equipment used in forestry, agriculture, and mining and quarry operations.

Q: How does this expertise help control downtime?

A: There are almost always several options for repair or replacement of a part—even



John Ramsey,
National Product
Manager for Truck
and Heavy Equip-
ment, GAB Robins
North America

an entire cab. So it's important to know how to evaluate these options—and the use of more readily available replacement parts is safe, practical, and efficient. There are times when a "service" cab, for example, can make sense, vs. waiting for a complete cab—often not in stock—to be manufactured.

Q: How do your adjusters know what to look for, when assessing a trucking claim?

A: We have the most experienced truck claims staff in the nation. I myself have been evaluating truck claims since the late 1970's. Our senior staff has an average

age of 20 years of experience in both the repairs and insurance industries. And we have more than 90 truck and heavy equipment specialists across the country, more than any other claims organization.

Q: That's a lot of experience. What about the young members of your staff?

A: At GAB Robins, we recruit a lot of people from the insurance industry, people who know the inside ropes. We

recruit from the insurance industry course, and we send all of our recruits for intensive training at our Denver training center. Many of our people also attend a number of other heavy equipment seminars throughout the year. We consider education to be a very important component of a top-line adjustment team.

Q: Do you provide service in all 50 states?

A: Yes, we do. We have three central service locations in the United States, and a toll-free number for claims reports. Adjusters can be on-site very quickly in the 48 contiguous states, and we also send truck specialists to Alaska and Hawaii for claims on a moment's notice. In fact, we handle thousands of truck claims each year. We have by far the most experienced, and the most comprehensive network in the industry.

Clara Van Hast, a New York-based writer, reports frequently on insurance and management.



There is no substitute for training and experience when you walk up to a truck that looks like this.

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DOES PREDATORY PRICING MAKE MICROSOFT A PREDATOR?

Justice's case is forcing many to ponder how harmful—or benign—the practice really is



In the past few years, Microsoft's free software has become a powerful weapon. When the software giant targets a market for domination, it frequently wins over customers with an irresistible offer: free products. Back in 1996, for example, Microsoft Corp. started giving away Internet Explorer, its Web browser—and in some cases arguably even “paid” people to use it by offering free software and marketing assistance. The strategy was crucial to the company's success in snatching market dominance away from archrival Netscape Communications Corp. “Even though Netscape constantly revised its pricing structure, it was impossible to stay competitive with ‘better than free,’” testified

Netscape CEO James L. Barksdale in the Justice Dept.'s antitrust suit against Microsoft.

Netscape isn't the only victim. In its march toward software supremacy, Microsoft has repeatedly given away things other companies were selling—siphoning revenues away from Stac, Symantec, Novell, Oracle, and many others (table, page 132). Embittered rivals such as Mitchell E. Kertzman, CEO of Network Computer Inc., complain that many of the giveaways “are effectively pred-

tory pricing.” These rivals warn that once Microsoft captures the market, it will start charging “monopoly rents”—and they point to evidence that Microsoft is already jacking up prices in some markets.

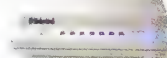
Despite competitors' outcry, Microsoft's growth is always, the Justice Dept. has dominated the case at the trial. Because of conventional wisdom among antitrust experts, long been a predatory pricing—a monopolist selling goods below cost—is not a particularly serious problem. In the courts regard predatory pricing as a so-called legal fiction: It's theoretically against the law, nearly impossible to prove. Justice has had little choice but to focus on Microsoft's other alleged anticompetitive tactics, such as tough contractual demands from business partners, that are often less easy to astute to competitors.

But hope for Microsoft's frustrated rivals may be on the way. A new generation of economists is questioning the current orthodoxy about predatory pricing—argues that it's wrong, especially where software is concerned. Although their theories haven't been adopted by the courts, and therefore have much impact at the Microsoft trial, they are starting to cause mainstream economists to revise their thinking on the issue. And that means that



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Lowball pricing can cost marketers a fortune— and gains in market share may vanish when prices rise

titrust law—which usually trails economic thinking by a decade or more—will probably eventually catch up.

The first to discredit the concept of predatory pricing were members of the free-market “Chicago School” of economists. About two decades ago, they conducted studies indicating that when companies tried to drive away competitors with predatory pricing, they generally lost a fortune by doing so and then surrendered any market-share gains as soon as they raised prices. Meanwhile, consumers benefited from lower prices.

In his 1978 classic *The Antitrust Paradox*, Chicago School mainstay Robert H. Bork belittled the laws against predatory pricing as “foolish” and argued that “attempts to outlaw it are likely to harm consumers more than would abandoning the effort.” It took a while, but Bork’s arguments were heeded by the Supreme Court in its landmark 1993 decision *Brooke Group Ltd. vs. Brown & Williamson Tobacco Corp.* Declaring that “discouraging a price cut... does not constitute sound antitrust policy,” the court made the legal test for proving predatory pricing so high that few companies have been convicted of it since.

RALLY ROUND. Although the *Brooke Group* decision still towers over the issue of predatory pricing, frightening all but the bravest lawyers from pressing claims, more and more economists think it’s outdated. They point, first of all, to economist Brian Arthur’s theory of network externalities. Arthur and others hold that once a company gains a decisive lead in an industry such as computing, where there is a strong tendency for consumers to band around one standard, it is almost impossible for rivals to unseat it. Thus, there’s more likely to be a payoff from predatory pricing than in, say, the cigarette business—the industry in question in *Brooke Group*. “In some ways, software is the perfect market for predatory pricing,” says Garth Saloner, a professor at Stanford business school. “There’s a tremendous incentive to give software away to build an installed base.”

The revisionists also argue that Bork and his ilk made simplistic assumptions about human nature. Under Chicago doctrine, for example, it is assumed that consumers wouldn’t accept a free product if there were a danger it would lock

them into unacceptably high long-term costs. But noting that many buyers frequently face short-term financial pressures, University of Washington economist Richard O. Zerbe Jr. figures “that’s not the way people behave.”

Additionally, the Chicago School underestimated how profitable a reputation for predatory pricing can be, says Georgetown University antitrust scholar Steven C. Salop. By scaring off potential rivals, such notoriety makes it cheaper for a competitor to conquer new markets. In high-tech markets, it’s even more effective, says Salop, “because there’s a continuous set of new products.”

FREE WARES: A BLESSING OR A CURSE?

Critics charge that Microsoft has a history of giving away the software other companies are trying to sell—and thereby winning lucrative markets from its rivals. Now, competitors say the practice amounts to predatory pricing. Some examples:

TYPE OF SOFTWARE	RIVALS
DISK COMPRESSION	STAC
INTERNET BROWSING	NETSCAPE
DATABASE ANALYSIS	ORACLE, ARBOR
FIREWALL	NOVELL
WEB-SITE MANAGEMENT	OPEN MARKET, NETSCAPE

DATA: BUSINESS WEEK

Exhibit A for the revisionists is Microsoft. In recent years, Microsoft has used free software as a competitive tool. Generally, the giveaways come in the form of “bundles,” in which the software is linked to an existing product and repackaged as an upgrade that’s “free”—or at least dirt cheap. Microsoft’s Internet Explorer, for example, has been wrapped into its Windows 98 operating system at no extra cost.

Right now, most of Microsoft’s giveaways are offered as part of its effort to gain share in the lucrative corporate computing market. For example, the company is offering free Web-server software to customers who purchase the Windows NT network operating system. Netscape sells a higher-powered version of the same software for \$4,100.

Microsoft vigorously defends these giveaways, arguing that cutting prices is good for consumers. Moreover, it argues that when it bundles together

several types of software into one affordable package, it’s “driven by what consumers want,” according to spokesman Greg Shaw. As for the worry of network effects, Shaw says it doesn’t give consumers enough credit for making intelligent and independent decisions.

These arguments win over many titrust scholars—including some who have attacked the company’s other business practices. “If Microsoft enters a new market and competes aggressively by giving away its software, God bless them,” says Carl B. Shapiro, an economics professor at the University of California at Berkeley.

SQUAWKING. But others aren’t sanguine about Microsoft’s pricing. The primary problem isn’t at the “front end,” when the predator lowers prices, say rivals, but at the “back end,” when prices are raised above-market levels. In recent months, Microsoft has been criticized for doing just that. The whole price it charges PC makers for Windows PC operating system, for example, has doubled during the past seven years, to as much as \$100, critics charge. Microsoft is also tightening the terms of its user license to squeeze more money out of corporate clients. Mary Welch, a consultant for Gartner Group, predicts that as the software market matures, Microsoft’s revenues from

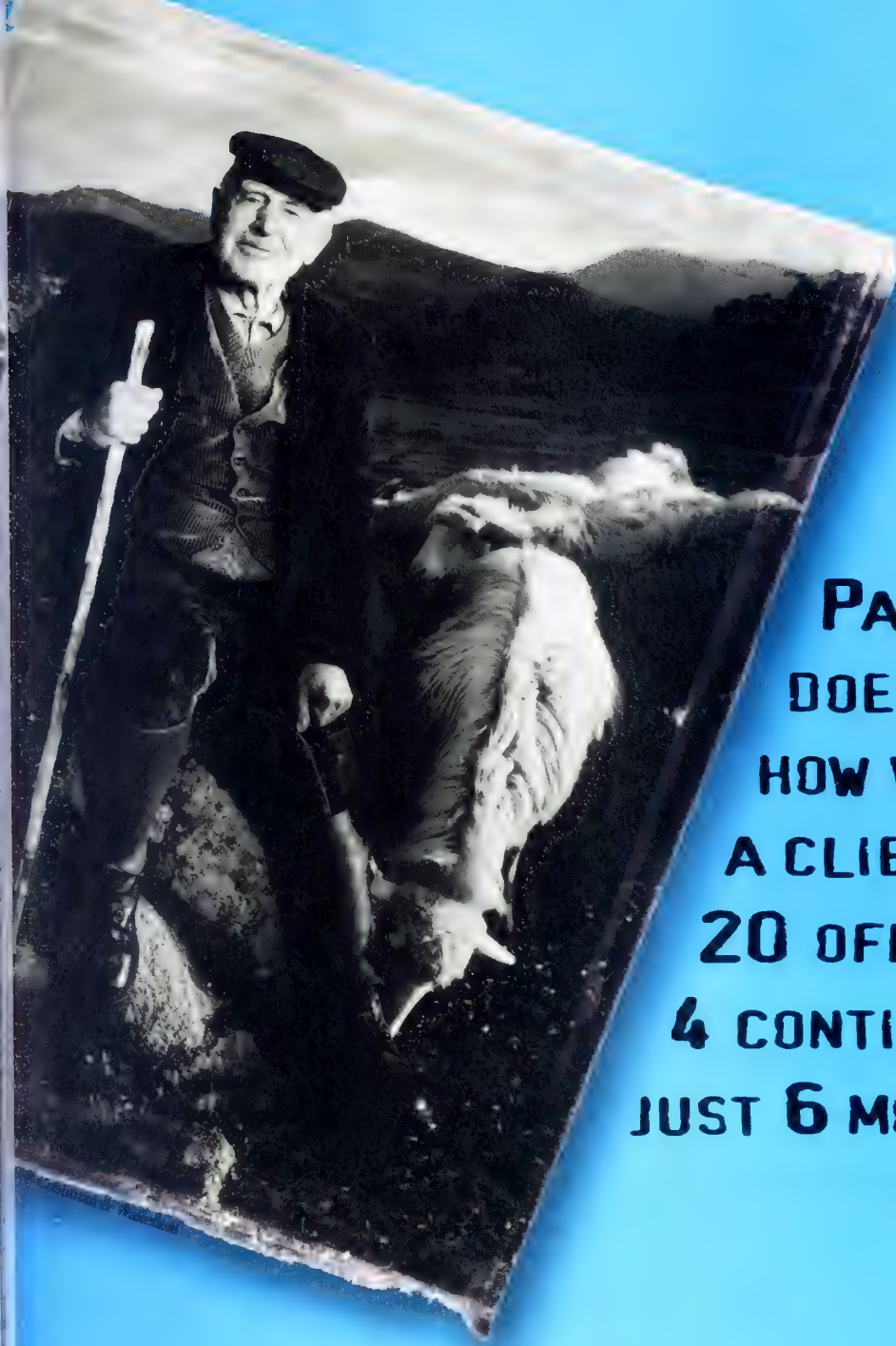
sales will inevitably decline and it will have “to look for ways to get more money out of its existing user base.”

For the time being, Microsoft appears to be refraining from charging the highest prices it can get away with. But as prices start to rise, complaints are likely to get a lot louder. And that, predicts George Washington University school antitrust professor William Kovacic, “could be the type of historical circumstance that would motivate a change in doctrine.” Until that comes, though, expect more cut-throat pricing.

By Mike France in New York
Steve Hamm in San Mateo, Calif.

BusinessWeek **COURT**

Business Week and Court TV post daily updates at www.businessweek.com and www.courtstv.com. Also, “Microsoft on Trial” airs every Thursday at 7 pm E.T. on Court TV.



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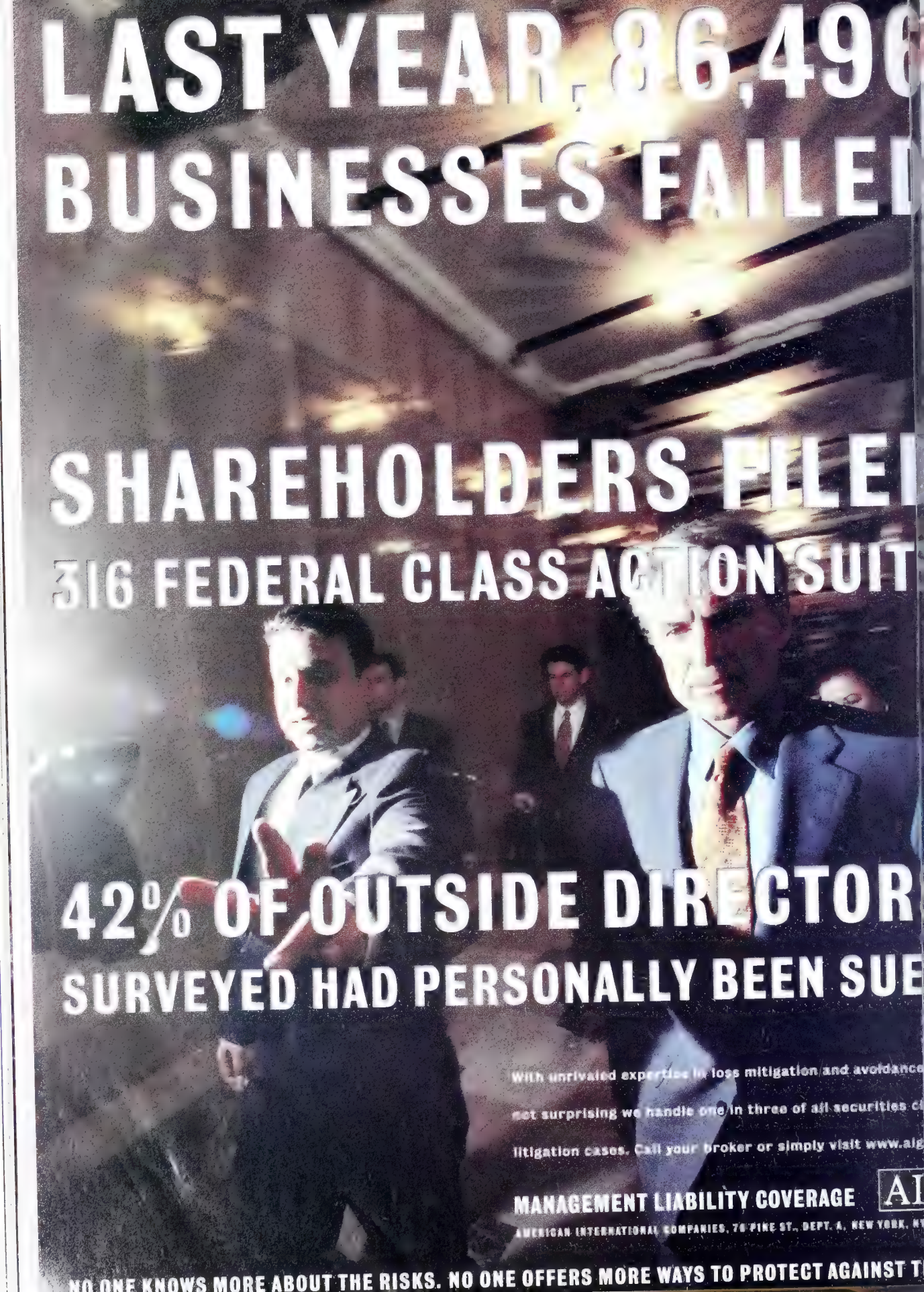
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NANOTUBES TO LIGHT UP GLASS DISPLAYS

SINCE THEIR DISCOVERY IN 1991, SLENDER MOLECULES known as carbon nanotubes have entranced scientists. The tubes, an elongated form of carbon-60 molecules known as buckyballs, are extremely tough and can function either as conductors or as semiconductors. Growing the tubes in a form suited to electronics applications has proven extremely difficult.

Not anymore. Zhifeng Ren, a research associate professor of physics and chemistry at the University of Buffalo, has developed a process for growing usable nanotubes—each just a few billionths of a meter in diameter—at relatively low temperatures. Like other scientists, Ren uses lasers to evaporate chemicals and form carbon residue. He broke new ground, however, when combined acetylene and ammonia gases in a microwave-vapor deposition technique. Within a few minutes, his method can produce hundreds of millions of nanotubes, growing in neat rows, perpendicular to the face of a glass panel.

Ren says the first application might be a new type of panel display. The nanotubes could precisely deliver electrons to phosphor dots on a glass plate, causing them to glow and create a picture. Scientists at Sandia National Laboratories are helping Ren test his tubes and find potential commercial partners. *Neil Gross*

INNOVATIONS

CARS are getting stuffed with all kinds of gadgets that range from an antenna, from cell phones to global positioning systems—and radar, in next generation Mercedes-Benz S-Class.

But cars needn't resemble porcupines. Engineers at Ohio State University are developing antennas with strips of parent metal films. They're transparent more than one can be sandwiched in the windshield's glass. The researchers also found a way to make the heating

in rear windows do their duty as antennas. Near-optic communications via fiber? Well, almost. Laboratories researchers transmitted light pulses through the air between the ends of two fibers—separated by 5 miles. Even across record gap, the setup

carried 2.5 billion bits of data per second, error-free. That's four times the speed of commercial wireless data links. The trick: special telescopes from AstroTerra Corp. in San Diego, Calif., that stare into each other's eye. Researchers

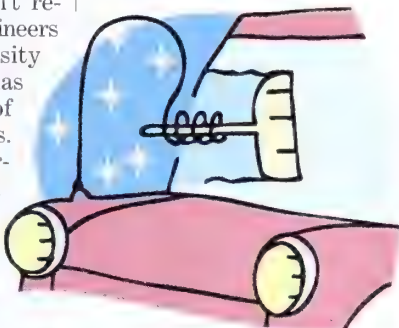


figure they have just scratched the surface so far. Through-air data rates could hit 10 billion flashes of light a second—across a few miles. However, while no-fiber links may be a quick way to establish high-speed communications, they remain strictly a fair-weather option. □

HOW TO TALLY PRODUCTIVITY ON THE SHOP FLOOR

BECAUSE MOST TOP MANAGERS were weaned on finance or marketing, manufacturing often gets short shrift when capital budgets are drawn up. Consultants find that manufacturers routinely funnel millions into reducing costs, yet pinch pennies when it comes to the factory, where investment can bring big gains in productivity and profits.

Bernard D. Asher, president of Real World Technology Corp. in Mt. Prospect, Ill., hopes to change all that. He has come up with a management tool, dubbed the manufacturing productivity index (MPI), that's simple but revealing: MPI is the product of throughput efficiency times gross margin percentage times revenue. The raw data



are readily available, so the result could be a clearer understanding of the payback potential of factory investments.

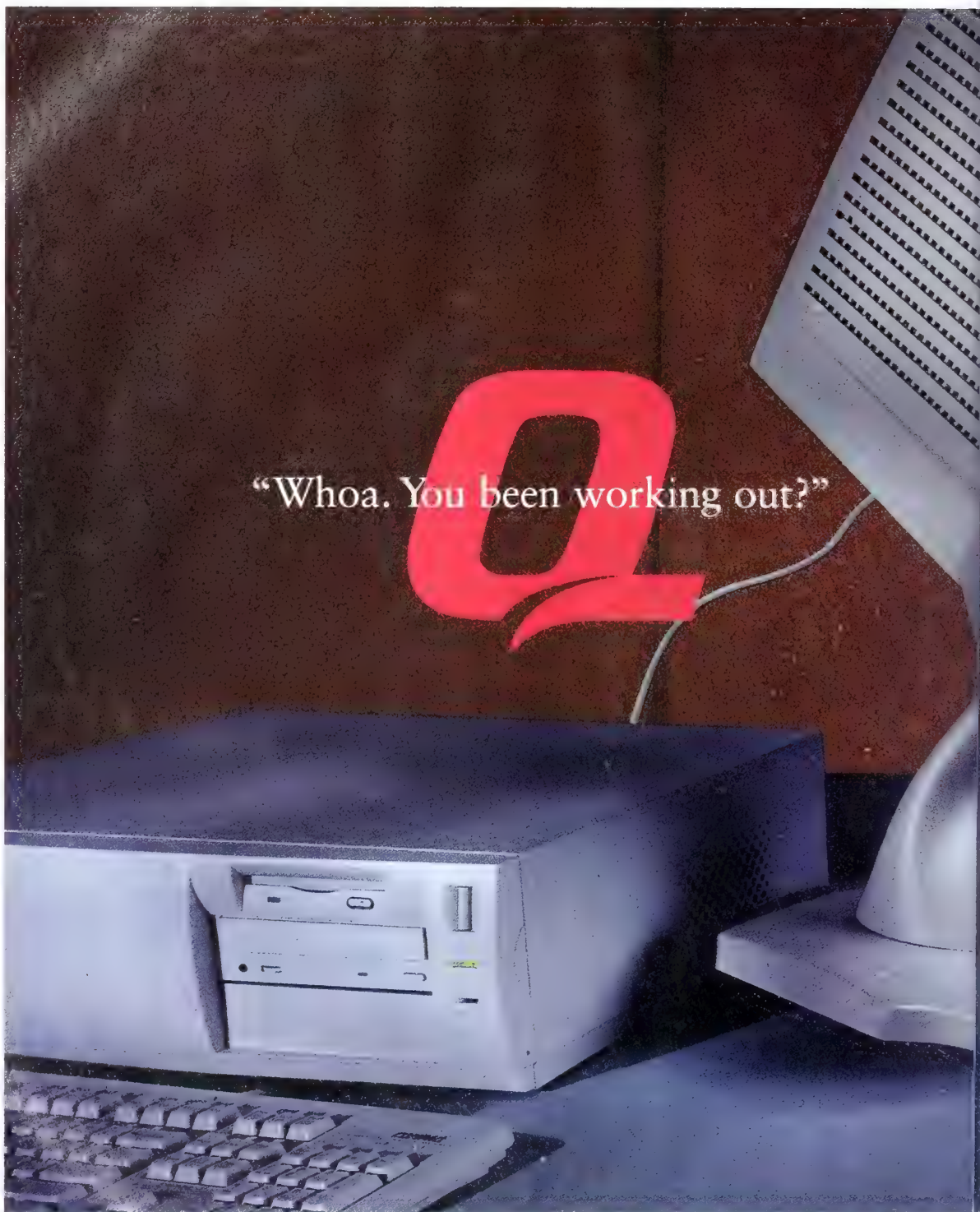
Asher has selfish reasons for trying to spur factory investments. His company sells a \$150,000 software package, called OnTrak, for scheduling shop-floor operations. But his MPI idea has struck a chord. Ernst & Young may adopt it in its consulting practice. And Boston consultant AMR Research Inc. advised its clients that MPI "is a step in the right direction," then promptly fielded a dozen calls from interested companies. □

SUGAR-COATED CELLS THAT MAKE INSULIN

TO ELIMINATE THE NEED FOR INSULIN INJECTIONS, MEDICAL researchers have tried repeatedly to transplant insulin-producing cells, called "islets of Langerhans," into diabetics. But the cells are quickly tagged as foreign and rejected by the patients' immune systems.

Now, researchers at Duke University have devised a new approach that promises to shield the islet cells from attack. The scientists use a special netlike microcapsule to surround insulin-producing cells, then they implant the capsule. The holes in the net are small enough to prevent immune-system T-cells from squeezing through. But they're large enough to let nourishing oxygen molecules in—and to allow insulin to flow freely out. In tests with diabetic rats, the method reduced blood-sugar levels by 25% for more than a week.

Interestingly, sugar is the key to the new capsules. They're made from liquid polymers, or hydrogels, that contain sugar molecules engineered to react to light. So, when coated cells are hit by a laser, the liquid solidifies, and the sugar molecules link up to form the backbone of the mesh structure. Despite positive results, chemist Mark W. Grinstaff, who heads the project, says it will take more than five years of further animal testing before human trials can begin. Meanwhile, his team is experimenting with different kinds of polymers that might be used to deliver toxic medicines. *Ellen Licking*



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STEVE JOBS

Can He Build Pixar?



The euphoria in the air is as thick as the fog in nearby San Francisco. One by one, employees of Pixar Animation Studios jump onto a makeshift stage on the company's outdoor patio to compete in the annual Halloween costume contest. A Roller Derby team cavorts to a 1970s' disco beat as Pixar's 400-plus employees hoot and holler. A decrepit John Glenn look-alike in a space suit canes his way onstage, waves weakly, and shuffles off. And, natch, Francis Ladybug, a character from Pixar's upcoming movie *A Bug's Life*, waddles up for a moment in the spotlight. Nice try, but first prize—free airplane tickets to Europe or Hawaii—goes to A.J. Riebli. At 295 pounds, with a shaved head and clad only in diapers, he flops around in a perfect imitation of the infant star of Pixar's 1988 Academy Award-winning short film, *Tin Toy*.

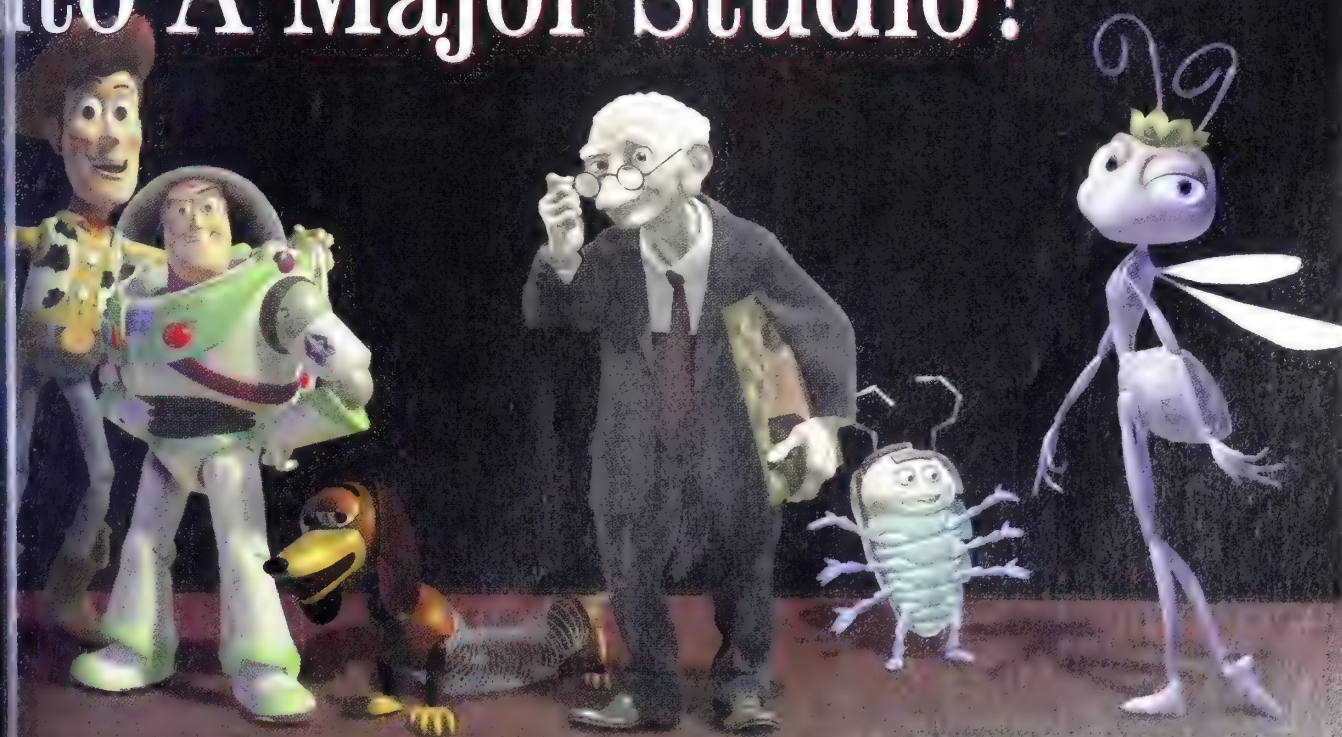
So how did Pixar's real larger-than-life character, Chairman and Chief Executive Steven P. Jobs, dress? Silicon Valley's *numero uno* visionary was attired in jeans, a plaid shirt, and New Balance running shoes because, well, he just didn't have time to get all gussied up. No problem, he's wearing what really matters anyway—a grin that stretches from ear to ear.

Cover Story

He has reason to be gleeful. After years of Pixar chasing its dream of making full-length movies using computers, the company is preparing to release what's expected to become its second box-office hit. Pixar's first feature film, 1995's *Toy Story*, became the third-highest grossing animated film of all time, with \$350 million in worldwide box-office revenues. On Nov. 25, Pixar will debut *A Bug's Life*, the

MOVIE MOGUL

into A Major Studio?



A BUG FARM'S LIFE

Twenty years of buzz in the evolution of a toon shop

1984 Disney animator John Lasseter joins filmmaker George Lucas' computer special-effects group, which later becomes Pixar.



LUCAS

1986 Steve Jobs purchases Pixar from Lucas for \$10 million, and Lasseter creates a short computer-animated film called *Luxo Jr.*, which draws rave reviews at a technical trade show.



1988 Lasseter's *Tin Toy* wins an Academy Award for Best Short Animated Film.



1991 After giving Lasseter the go-ahead to make *Toy Story*, Disney signs Pixar to a three-film deal that gives Pixar roughly 10% of movie profits.



BRONFMAN

on making movies seeks counsel



story of a courageous ant named Flik who fights back against extortionist grasshoppers. The movie is not expected to reach the extraordinary box-office highs of *Toy Story*—analysts peg *A Bug's Life* at \$250 million worldwide—but it could be a gold mine for Pixar.

Thanks to a cushy deal that Jobs cut with Walt Disney Co. last year, Pixar will get an equal share of the profits, after Disney's 12.5% distribution fee, and the full backing of Disney's unbeatable marketing and distribution clout. That has

drawn merchandising deals like bees to honey: Everyone from Mattel Inc. to McDon-

ald's Corp. is churning out *A Bug's Life* paraphernalia—toothbrushes, candy bars, even bed sheets. There will be caterpillar Beanie Babies modeled after the movie's Heimlich, \$30 voice-activated Fliks, and no less than 65 million Happy Meal toys. The bottom line: After spending \$45 million on its half of the production costs, Pixar could reap as much as \$200 million in merchandising royalties, video sales, and box-office receipts, vs. \$53.8 million so far from *Toy Story*.

Wall Street is clearly starstruck. Pixar's stock has soared to 48 from 23 a year ago based on the high expectations for *A Bug's Life* and two other movies in the works. Indeed, Pixar's revenues are projected to rocket from \$11.5 million this year to \$193 million in 2001, with profits soaring from \$3.9 million to \$87 million, according to Merrill Lynch & Co. analyst Jessica Reif Cohen. That has earned Jobs membership in the billionaires' club, with his 73% stake worth \$1.4 billion.

INDENTURED SERVANTS. But Jobs is after much more than money. What he's planning is nothing less than building Pixar into a movie studio for the 21st century—one that will rival Disney for the hearts and minds of families around the world. In a sense, the influence he's seeking is as pervasive as what he sought when he founded Apple Computer Inc.: He wants Pixar to tell the stories that children grow up with—the *Snow Whites*, *Mary Poppinses*, and *Lion Kings* for future generations. "I think Pixar has the opportunity to be the next Disney—not replace Disney—but be the next Disney," he says.

That's quintessential Jobs—sweeping, bold, and, as always, audacious. While Disney has built its reputation over 70 years with gobs of talent and billions of dollars, Pixar has

made all of two feature films so far—counting *A Bug's Life*. Credit Jobs for cutting a sweet deal with Disney in which Pixar has a shot at rich profits. Still, it's Disney that controls the future use of all the Pixar characters and films that develop together. And it is Disney that possesses the marketing might to transform Flik from a mere image on the screen into a household name.

So how will Jobs achieve his dream? Not surprisingly, he's tapping into his Silicon Valley roots and using computer to forge a unique style of moviemaking. In *A Bug's Life*, Pixar has developed computer animation that allows more realistic backgrounds, texture, and movement than ever before—from the stars of the show right down to a simple leaf. So real leaves are translucent, Pixar's engineers developed special software algorithms that both reflect and absorb light, creating luminous scenes among jungles of clover. As for characters in *A Bug's Life*, they have up to 3,900 potential movements, vs. 700 in *Toy Story's* characters.

What's more, films using computer animation are very creative. They cost 30% to 40% less to make than traditional animated films because only one third as many staffers are needed. And the process yields digitally stored characters and backdrops that can be recast inexpensively into sequels.

Of course, films that touch our hearts require far more than great technology. They depend upon the creative spark. To get that, Jobs has fostered a campuslike environment

Cover Story

THRILLER

After a rocky start, Pixar's stock has recovered, thanks to prospects of higher revenues and profits



superagent Michael Ovitz, Universal chief Edgar Bronfman, and investment banker

Toy Story is in November,

lic, 140 out

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1996 As *Toy Story* mania fades, so does Pixar's stock, dropping from 29 to 13 during the year. In March, Jobs and Eisner agree on a framework for a new agreement.



1998 Pixar wins an Academy Award for *Ger's Game*, a short film with advances in animating human skin. On Nov. 25, after months of heavy marketing, *A Bug's Life* will debut.



1999 Pixar plans to release *Toy Story II*.

PIXAR

1997 Disney and Pixar announce a five-film deal that gives Pixar roughly 50% of the profits on its films. Jobs scraps a CD-ROM game division to focus only on movies.



2000 Pixar plans to release a film code-named *Hidden City*—and take a year off from its flick-a-year pace in 2001.

2004 John Lasseter's contract, a key reason Disney signed the 1997 agreement, will end.

ar similar to the freewheeling, charged atmosphere in early days of his beloved Apple, where he has returned as CEO. Instead of just computer experts, the company is an eclectic mix, including landscape artists, puppeteers, a Danish rock star. And no one is more essential to stoking the creative fires than John Lasseter, Pixar's Academy Award-winning vice-president of creative. The 41-year-old Lasseter, known for his Hawaiian shirts and irrepressible enthusiasm, was director of *Toy Story* and *A Bug's Life* (1998). "He is to animation what Steven Spielberg is to action films," gushes Disney Studios Chairman Joe Roth. **FINING THE PACE.** With Pixar's unique combination of technology and creativity, Jobs could become Silicon Valley's first movie mogul. Should *A Bug's Life* approach the box-office success of *Toy Story*, Pixar will have made the two most popular animated films since Disney's 1994 megahit *The Lion King*. "In Hollywood, there are very few brands—really just Disney and Spielberg," says Jobs. "We want to be one. To do that, Pixar must churn out hits at an aggressive pace—Jobs aims to make roughly one movie a year. "They will emerge as a leading digital animation studio—a filmmaker that parents and children will appreciate and trust," analyst Paul W. Noglows of Hambrecht & Quist, which provides investment banking for the company.

But many in Hollywood think Jobs is living in Fantasyland. Industry's cognoscenti consider the computer exec another

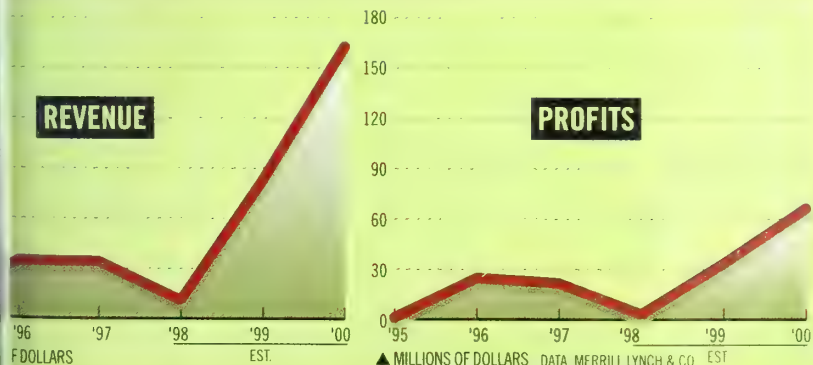
movie-industry wannabe, and Pixar, they say, acts as little more than a well-paid subcontractor to Disney. Indeed, some say Pixar's fate rests almost entirely in the hands of Disney—its partner but also a potential competitor. The Hollywood powerhouse holds script approval on Pixar films and is doing some of the heavy lifting on the creative end. All the casting, music production, and some of the screenwriting for *A Bug's Life* was handled by Disney. Sure, Pixar will be able to reap royalty checks, but that's far from operating as an independent studio. "There is no such thing as a great deal with Disney," says David Geffen, co-founder of Pixar rival DreamWorks SKG. "They control the property, and they are just giving [Pixar] some of the profits."

Already, Disney is hard at work ginning up its own technical wizardry—100 of its employees are quietly honing their computer-animation skills at a former Lockheed Martin Corp. airplane plant near Burbank Airport. Their task: to produce Disney's first completely computer-animated film by 2000, called *Dinosaurs*, which will mix photorealistic, computer-generated tyrannosaurs and brontosaurus with real-life backgrounds. Disney also has invested in Tippett Studio, a Berkeley (Calif.) special-effects house that is developing a computer-animated space adventure for adults, code-named *Expedition*. And Disney bought the rights to a claymation script about animals escaping from a zoo from writers Mark Gibson and Phil Halprin.

These ventures could cause a rift in the seven-year-old

Pixar-Disney marriage. Should Disney develop other sources of top-notch computer-animation fare, Pixar may find it tough to land another lucrative deal with the Hollywood giant after the current five-film deal expires—especially if Pixar produces any mediocre movies. That could leave the upstart with a smaller slice of profits, less guaranteed financial support from Disney—or no deal at all.

As dire as that sounds, Pixar executives aren't fretting. They say they will have options beyond Disney—especially if they continue making blockbusters. Under the five-film deal, Jobs can start talks with other studios after completion of a



third movie, probably in 2002. With a few hits to its name, Pixar could either go it alone or turn to players like Paramount Pictures Corp. that are eager to get into the kid-flick market. There is a precedent.

Jobs, for example, points to filmmaker George Lucas, who has remained independent and still gotten strong distribution from studios by making supernova hits like *Star Wars*. "If we're as successful as we hope we'll be, we should have that kind of clout," says Pixar CFO Lawrence Levy.

Cover Story

Besides, Jobs says he's not planning on leaving the Magic Kingdom anytime soon. "I hope we're doing business with them for another 20 years," he says. He may get his wish—and more. Analysts say that if Pixar stays at the top of its game, Disney may try to snap it up. "If they paid \$19 billion for ABC, they can probably afford us," quips Jobs. But he points out he doesn't have to sell unless it's an exceptional offer because he owns almost three quarters of the stock. For Disney's part, execs say they have no plans to make a bid for Pixar.

If there's tension about what the future may hold, there's no evidence of it today. Lasseter's moviemaking is in line with Disney's penchant for heartwarming fare. And the companies developed a considerable amount of trust during the development of *Toy Story*—when Disney taught Pixar how to handle production and budgeting and Pixar proved its artistic

So far, Pixar's potent mix of tech and talent is years ahead of its rivals

mettle. Lasseter, for example, to convince Disney that *Toy Story* could succeed with being a musical like Disney's other animated films. And while Disney closely monitors Pixar's spending and progress via weekly videoconferences and visits every two weeks or so, the relationship seems more collaborative

contractual. "We act like partners are supposed to act," says Peter Schneider, president of Walt Disney Feature Animation. "We look every day at what they are doing. We demand, we push, we talk, and the end result is a better product. Who gets the credit really is never the issue for me, although I know sometimes it is for Steve."

Pixar will need all the help it can get. An increasing number of studios are cranking out children's films to try to get a piece of what's long been considered the most lucrative market of Hollywood. Witness the crowded schedule this fall: Nov. 20, Paramount will release a movie based on the popular *Rugrats* TV show. Universal Studio Inc.'s live-action *Beauty and the Beast* debuts Nov. 25, and *The Prince of Egypt*, a story of Moses as told by DreamWorks, will open on Dec. 1. **INFESTATION?** Worse, Pixar's days as the only computer-animated show in town are over. Industrial Light & Magic is working on a *Frankenstein* remake. Fox will do *Planet Ice*, a computerized futuristic look at space travel that's also pegged for 2000. And then there's archrival DreamWorks, the talent and well-funded partnership of Geffen, Steven Spielberg, Jeffrey Katzenberg that brought *Antz* to the screen on Oct. 1.

How the DreamWorks film was released sparked some speculation of a Bugs War between the two rival studios. DreamWorks

LET THERE BE LIFE

From pen strokes to pixels to projectors: How a little critter evolved from concept to screen



FLIK IS BORN

Once the team of story writers hatches the idea for a movie, artists create hundreds of detailed drawings of the characters, such as the star of *A Bug's Life*.



IN WIREFRAME

Experts create wireframe models of the characters on computers and give them control points—computerized marionette strings—that allow animators to move an arm or eyebrow.



IN POLYGONS

Solid surfaces are added to give animators a sense of what the characters look like. This is what animators manipulate on their screens to make the characters act their parts.



RENDERED

After the animators are through, a program called a shader gives each character its color and texture in different lighting. He's ready for show time.

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concerned *A Bug's Life* would overshadow its own *The Prince of Egypt*, originally scheduled for movie theaters about the same time. So it tried a maneuver Jobs flatly labels "extortion." According to Jobs, Katzenberg told Pixar to delay the release of *A Bug's Life* or DreamWorks would make its similarly insect-filled *Antz*. When Jobs said he couldn't control Disney's schedule, Katzenberg suggested that

Pixar not deliver the film on time, says Jobs. "I said to him, 'Don't even go there.'" Katzenberg declined to comment. *Antz* beat *A Bug's Life* into theaters and already holds the record for a non-Disney film, with nearly \$75 million in revenues.

How will Jobs and Pixar stay ahead of DreamWorks and the rest of the pack? So far, the company's powerful mix of technology and talent is probably two years ahead of competitors. Employees have published more than 50 papers on computer graphics, earned 18 patents, and won 14 Academy Awards since 1986.

"We're not jumping on the bandwagon, we're making it," says

Pixar's founder and Chief Technologist Edwin E. Catmull. Jules Engel, head of the experimental animation department at the Disney-supported California Institute of the Arts, the nation's top animation training ground, agrees. "They're the best when it comes to producing computer-animated films," he says.

Pixar has earned such kudos not just because of its technology but also because of its heartwarming storytelling. When it's time to start a project, Lasseter isolates his eight or so writers and directs them to forget about the constraints of technology. While many studios try to rush from script to production, Lasseter takes up to two years just to get the story right. "It's not simply the technology that makes Pixar," says Dick Cook, president of Walt Disney studios. Once the story is done, artists create storyboards and copy them onto videotapes called reels—a standard industry practice. "A sequence has to play great in reels, and then it'll be gangbusters," says Lasseter. "That's our No. 1 rule."

MOUSE POWER. Once a story is approved by Lasseter and Disney, Pixar's creative staffers go to work. Landscape artists

paint lush back-grounds, sculptors create 3-D models of characters, and animators set about giving the characters life. But that doesn't mean the creative process is done. Everything can change right up to the last minute—taking full advantage of the fact that, unlike live-action films or even traditional hand-drawn animated films, the director can change sets,



TOUCHY FEELER

A child warms up to Flik from *A Bug's Life* in a Disney store

characters, or lines with a few of a mouse.

In *A Bug's Life*, the story was revamped after more than a year of had been complete. Originally, it was about a troupe of circus bugs run by Flea that tries to cue a colony of grasshoppers from marauding grasshoppers. But because of a flaw in the story—why would circus bugs risk lives to save stran-

ants?—co-director Andrew Stanton recast the story to about Flik, the heroic ant who recruits Flea's troupe to the grasshoppers. "You have to rework and rework it," Lasseter. Indeed, one scene was rewritten 30 times.

Only after the basic story is set does Lasseter begin to think about what he'll need from Pixar's technologists. It's always more than the engineers expect. Lasseter, for example, demanded that the crowds of ants in the movie not be a single mass of look-alike faces. To solve the problem, engineer William T. Reeves developed software that randomly applied physical and emotional characteristics to each ant. In another instance, writers brought a model of a butterfly named Gypsy to researchers, asking them to write code so that when she rubs her antennae, you can see her hairs press down and pop back up.

That attention to detail keeps Pixar on the cutting edge. It has turned out ever more lifelike short films, including the Oscar-winning *Geri's Game*, which used a technology called subdivision surfaces. This makes realistic simulation of human skin and clothing possible. "They're absolute geniuses," says Jules Roman, co-founder and CEO of rival Tippett Studio. "They're the people who created computer animation re-

To achieve such feats, Pixar tends to the care and feeding of its creative stable. Each new hire spends 10 weeks at Pixar University, an in-house training program that includes courses in live improvisation, drawing, and cinematography. The school's dean is Randall E. Nelson, a former judge known to perform his act using chain saws so students in animation classes have something compelling to draw.

Pixar is different from big studios in another way: There's an undercurrent of nearby Silicon Valley. Other than Lasseter, no one has long-term, Hollywood-style contracts. Everyone instead gets stock options. "We're blessed to be 600

apart from Hollywood," says Lasseter.

If Pixar has survived, it certainly wasn't an easy feat. The roots of the company stretch back to 1975 and a vocational school in Old Saybrook, N.Y., called New York Institute of Technology. It was there that Catmull, a straitlaced Mormon from Salt Lake City who loved animation but couldn't

Cover Story

JUST HOW BIG WILL A BUG'S LIFE BE?

Two different scenarios for how the film will fare

	HO-HUM	MEGAHIT
WORLDWIDE BOX OFFICE RECEIPTS	\$186*	\$438*
DISNEY'S AND PIXAR'S CUT OF THE RECEIPTS	94	219
REVENUES FROM VIDEO SALES	330	577.5
REVENUES FROM MERCHANDISE ROYALTIES	50	187.5
REVENUES FROM BROADCAST RIGHTS	10	50
PRODUCTION COSTS	90	90
DISNEY'S MARKETING COSTS AND DISTRIBUTION FEE	292.9	449.4
TOTAL PROFITS TO DISNEY AND PIXAR	110.8	584.4
PIXAR'S PROFITS	55.4	252.2

*IN MILLIONS

DATA: MERRILL LYNCH

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PART #325:

Asset Management



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STORY #7:

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LAWRENCE LEVY

EXECUTIVE VP, CFO

He joined in 1995 from graphics company Electronics For Imaging—in time to help pull off Pixar's blockbuster, \$140-million IPO. He's the company's voice of reason on Wall Street.

EDWIN CATMULL

EXECUTIVE VP, CTO

A cartoonist who couldn't draw, he has developed many core concepts for computer animation. He runs the technical team that's essential to Pixar's success and remains the keeper of its free-spirited culture.

STEVE JOBS

CHAIRMAN, CEO

His Apple Computer is on the rebound, and Pixar is headed for high times. He landed the critical partnership with mighty Disney that could help him achieve his vision of building his own Digital Age Disney.

JOHN LASSETER

CREATIVE VP

Pixar could be called Lasseter Studios—such is his reputation in Hollywood. Disney tried to hire him away from Pixar three times before agreeing to a long-term contract to get access to his services at Pixar.

SARAH McARTHUR

VP OF PRODUCTION

The executive producer of Disney animation unit before joining Pixar in 1997, she helped make *The Lion King* a hit. Now, she's bringing big-studio processes to Pixar so it can make one a year.

teamed up with the people who would later form the core of Pixar. "It was artists and technologists from the very start," says Alvy Ray Smith, who worked with Catmull and is now at Microsoft Corp. "It was like a fairy tale."

EARLY LOSSES. But there was no happy ending. In 1979, Catmull and his team grew disillusioned with New York Tech and went to work at Lucas' Industrial Light and Magic in San Rafael, Calif. Catmull decided to leave there after seven years when it became apparent Lucas only wanted

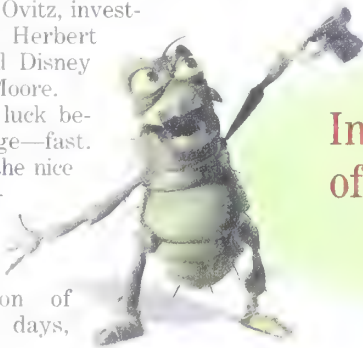
computer animation for special effects, not feature-length films.

That's when Jobs

appeared on the scene. Less than a year after being ousted from Apple in 1985, Jobs bought what then became known as Pixar from Lucas for just \$10 million—one third of Lucas' asking price. Still, it was hardly a bargain. As losses mounted over the next five years, Jobs invested an additional \$50 million—more than 25% of his total wealth at the time. "There were times that we all despaired, but fortunately not all at the same time," says Jobs.

Still, Catmull's team of technologists was making major breakthroughs, and in 1991, Disney gave Pixar a three-film contract that included *Toy Story*. As the film neared completion in early 1995, Jobs decided to take a bold step. Since it was clear Pixar couldn't prosper selling its technology to others, it was time to recast the company as a moviemaker. A novice in Hollywood, he and CFO Levy visited moguls, including Universal parent Seagram CEO Edgar M. Bronfman, then superelement Michael Ovitz, investment banker Herbert A. Allen, and Disney CFO Robert Moore.

Pixar's luck began to change—fast. Rather than the nice little film Disney expected, *Toy Story* became the sensation of 1995. Within days,



In the delicate balance of power, Disney seems to have an edge

Pixar went public. When the shares, priced at \$22, shot to \$33, Jobs called his best friend, Oracle CEO Lawrence Ellison, to tell him he had company in the billionaires' club.

With Pixar's sudden success, Jobs returned to strike a new deal with Disney. In March, 1996, at a lunch with Disney Co. chief Michael D. Eisner, Jobs made his demand: an equal share of the profits, equal billing on merchandising on-screen credits, and guarantees that Disney would market Pixar films as they did its own. Disney, particularly worried about losing Lasseter, agreed. "[Jobs] had the brains, energy, and chutzpah to protect Pixar's interests. He enabled us to negotiate as equals," says former Pixar marketing executive Pamela J. Kerwin, who is now COO of GeoVector Corp., a maker of handheld computing devices.

Pixar's future now rests on how its partnership with Disney plays out. As long as Jobs and his team provide the films Eisner wants on schedule, Pixar will prosper. With Disney's help, Pixar could find that *A Bug's Life* is just the first of many rich paydays ahead. "They're in the most profitable part of the film business and are partnered with the most powerful company in that industry," says Merrill Lynch's Cohen. "They're in a very good position."

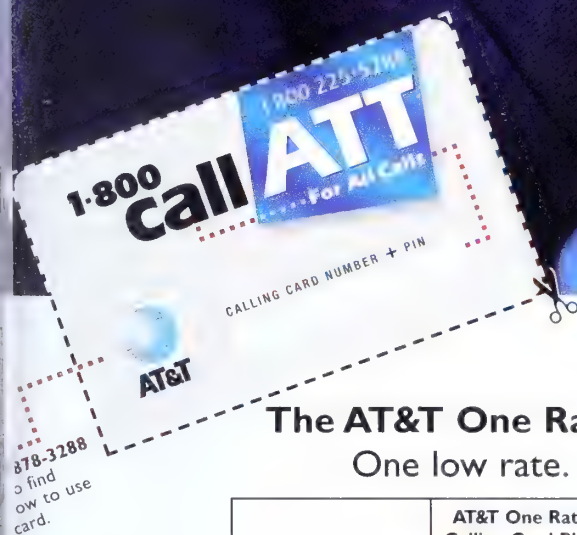
BACK DOOR. Indeed, with Disney as a partner, Pixar can't lose money so long as it keeps the movies coming. Morgan Stanley Dean Witter analyst Richard Bilotti figures Pixar breaks even so long as its films do \$70 million at the box office—and no Disney film has failed to bring in that much since *Oliver and Company* in 1988.

And Pixar's upside is tremendous. In a business where the best moviemakers are lucky to get a 15% share of box-office receipts from stingy studios, Pixar will get 50% of the profits. That's defined what's left of the ticket sales, video sales, merchandising royalties after production costs, and Disney's reimbursement for marketing and distribution fees.

Still, something as nebulous as "artistic differences" could get in

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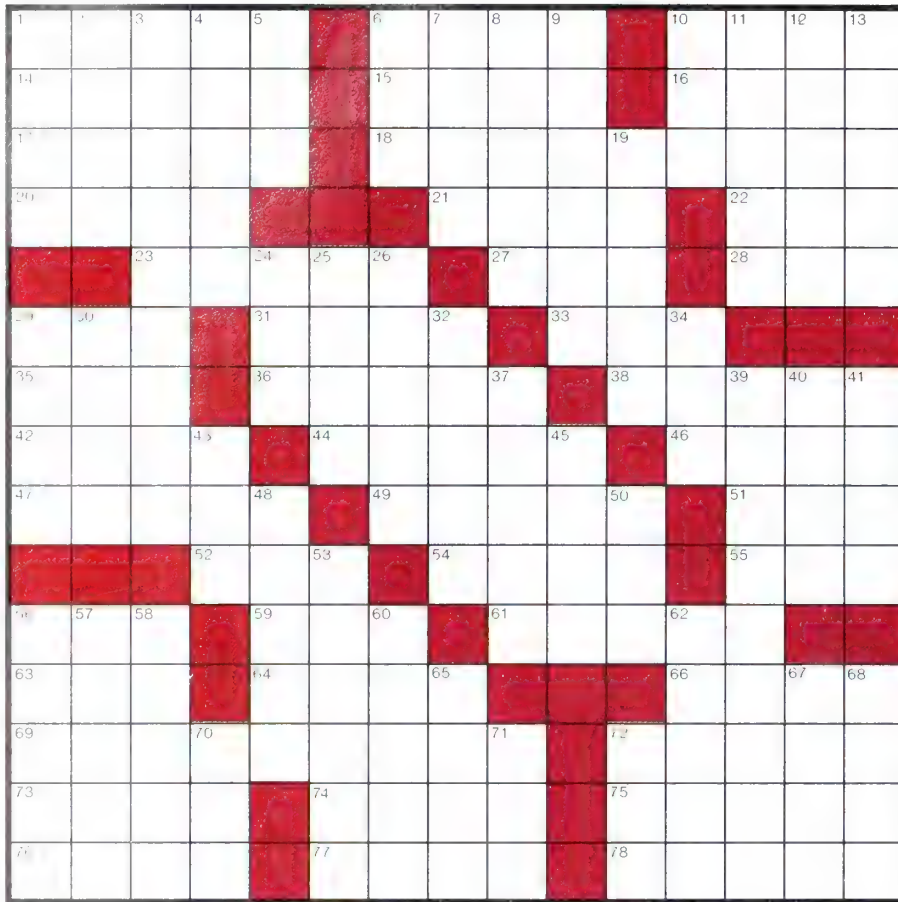
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Puzzle #2



ACROSS

1. ___ point (interest-rate unit)
6. Electrically versatile
10. George Bush's college team
14. Resort island off Venezuela
15. Heroine of 1977's top-grossing film
16. "___ derniere" (see page at right)
17. "My Life in Court" author
18. Mortgage finance agency
20. Inventor's inspiration
21. ___ hat
22. Anger
23. Buffett's headquarters
27. Pesticide banned in '72
28. Carbon ___ (refrigerant, for short)

29. Pronoun for a yacht
31. Correspondence
33. ___ Lingus (carrier to Dublin)
35. Shade tree
36. Bona ___ (credentials)
38. One way to procure office equipment
42. Change a person's long-distance provider without permission
44. '80s Treasury Secretary
46. When Operation Overlord began
47. Mortgage source, for short
49. Light lunch, perhaps
51. British brew
52. Determine, as standards
54. Late-night TV name

55. McKinley and Washington: Abbr.
56. Empty talk
59. Have debt
61. Buddy's buddy
63. From ___ Z
64. Dickens heroine
66. IV years from now
69. Microsoft cofounder
72. Singer Bonnie
73. Cube creator Rubik
74. Hollywood crosses it
75. J&J subsidiary
76. Gets free (of)
77. Exxon's ex-name
78. Old-time anesthetic

DOWN

1. ___-Sadr (former president of Iran)
2. Dry as a desert
3. Author of "The 9 Steps to Financial Freedom"
4. Auto-suspension part
5. Mediterranean island: Abbr.
6. Math subject: Abbr.
7. Put a roof over one's head
8. Ate well
9. Charles Bronfman's home
10. ___ out a living
11. ___ order (directive to a br)
12. Solicitous phrase
13. Cruise-ship activity
19. Chip giant
24. Big name in bowling alle
25. Minoxidil creation
26. Corporate assistants
29. It acquired Amerada in '6
30. Singer Fitzgerald
32. Corporate department
34. Oil-rig firefighter Adair
37. Corporate department
39. "The Father of Modern Economics"
40. U.S.-U.S.S.R pact of the
41. "___ ONLY" (top secret)
43. HMO enrollees' selection: Abbr.
45. It means "billionth"
48. Mrs. Helmsley
50. Snezy colleague
53. Original number of stock the DJIA
56. Publisher's purchase
57. Maker of the first video
58. Major's money
60. Island supported by Iaco
62. Sports Authority's former owner
65. One of your contacts
67. "___ Jury" (Spillane novel)
68. "Take ___ leave it!"
70. ___ Altos (Silicon Valley c
71. Prefix for conservative
72. Wade's opponent

For answers to this puzzle:

Turn to page 212 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.



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way. Disney has a back door that could leave Pixar on its own—and vulnerable. It's simple: If Disney doesn't get a Pixar pitch it likes within a contractually prescribed time, it can abandon the partnership. "The risk is the creative risk—that they become wedded to something we're not crazy about," says Disney's Roth, who adds he doubts the two studios will have such differences.

Still, the fiery, opinionated Jobs typically doesn't go for very long without creating controversy. He did elicit warnings from Disney execs for going public with his beefs that Dream-

Works' *Antz* was a rip-off from Pixar. "We talked about says Roth. "We knew we had a great film. We didn't have [have Jobs] go around talking about anyone else's film."

Investors had better hope that's as rough as relations with Disney ever get. For now, Disney and Jobs say have a good thing going, and Jobs is clearly enjoying his on and career as a movie mogul. Maybe the Pixar-Disney deal will have a happy ending, after all.

By Peter Burrows in Point Richmond, Calif., and Roger Grover in Los Angeles

PIXAR'S AMBASSADOR TO THE MAGIC KINGDOM

For Pixar Animation Studios creative chief John Lasseter, even commuting in rush-hour traffic can be fun. Whenever possible, he rides with Pixar animator James F. Murphy—from their homes in Sonoma, Calif., to the offices 55 miles away in Point Richmond—so they can get in the fast-moving carpool lane. They don cheery toy crowns, blast rock music such as the Beatles' *Revolution*, and mock solo commuters in the slow lanes with cries of "Look at you peasants!" and "We Rule! We Rule!"

Says a beaming Lasseter: "We call ourselves the Diamond Kings because of the diamonds painted in the car-pool lane."

It's oh-so Lasseter to conjure a bit of whimsy out of something as mundane as commuting. The 41-year-old overgrown kid, with five sons of his



BOY WONDER: Lasseter is pushing animation's limits

Tin Toy, for example, was a humorous look at what it's like for a small toy on its first encounter with a baby—a huge drooling monster in the eyes of the toy. That was a breakthrough in animating characters: The baby's face had 20 control points so Lasseter could, for example, raise an eyebrow with the touch of a computer mouse. "It's easy to get carried away with action rather than acting, but John really makes these computer characters act so the audience knows what they're feeling," says Ollie Johnston, a retired Walt Disney Co. animator who helped make *Pinocchio*, *Bambi*, and *Cinderella*.

Lasseter's creativity is matched only by his drive to push the limits of computer animation. Pixar animation supervisor Glenn J. McQueen remembers the first time Lasseter described the climactic scene in *A Bug's Life*, when hundreds of ants are fighting a gang of grasshoppers in a rainstorm. With so many characters moving against an ever-changing background, the scene was sure to be a technical nightmare. "The blood just drained from our faces,"

says McQueen. Still, Lasseter insisted, and the scene was done—after more than 15 staffers worked four months to produce what became 60 minutes in the film.

Lasseter is a favorite of the Pixar troops. Credit his infectious enthusiasm, his easily dispensed bear hugs, and openness to others' ideas. Take the voice of Heimlich the caterpillar in *A Bug's Life*. Story artist Jorgen Klubien suggested the blubbery guy have a silly Bavarian accent—sort of like Sergeant Schultz on *Hogan's Heroes*. Writer

Joe Ranft then piped up with a rendition. Lasseter not only went with it, but gave the voice-over job to Ranft instead of the actor Disney had lined up.

FAMILY MAN. How did Lasseter become a heavyweight in toon town? Born in Whittier, Calif., outside Los Angeles, the lifelong cartoon junkie decided to become an animator as a freshman in high school after reading a book on the making of *Snow White*. He was a skilled artist from the start, thanks in part to his mother, high school art teacher for 38 years. Lasseter joined Disney after graduating from the California Institute of the Arts but quickly got disillusioned with its bureaucratic ways. He quit in 1984 and joined Pixar.

Now, 15 years later, Pixar has its five-film deal with Disney—because of Lasseter. Disney wanted Lasseter's skills so badly that it insisted Pixar sign him to a seven-year contract and it pays half his salary. "He's like a member of the family," says Disney Studios chief Joe Roth. The Diamond King has arrived.

By Peter Burrows in Sonoma, Calif.

Cover Story

own, is the creative force behind Pixar's 1995 hit *Toy Story* and the upcoming *A Bug's Life*. While animation's crème de la crème used to look down their noses at using computers, Lasseter, with two Academy Awards to his credit, has found magic in technology. Now he's earning \$700,000 a year and respect from his colleagues. "John and his crew have real genius," says Chuck Jones, the animation legend who created Bugs Bunny and RoadRunner for Warner Bros. Inc.

What sets Lasseter apart is his ability to come up with imaginative stories and then use computers to create believable, lovable characters. His 1988 Oscar-winning short film

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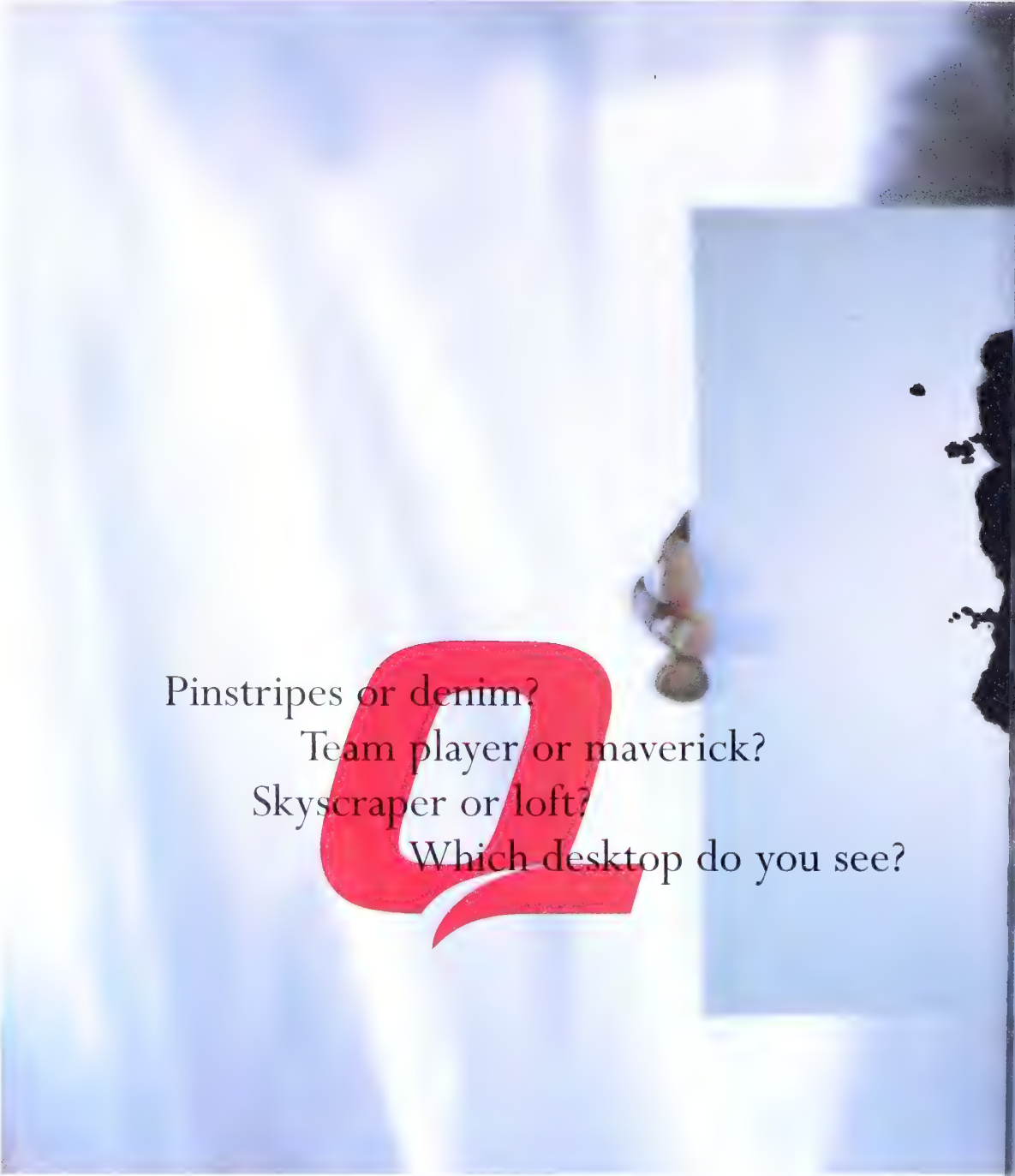
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For his achievements, Hilbert has been well compensated. Very, very, very well compensated. Last year, he pocketed about \$119 million, making him one of the highest-compensated CEOs in the country. His fellow senior execs have also done well. It's routine to see bountiful pay packages in the executive suite these days. But when it comes to treating top executives like kings, Consecro could still teach other senior officers some new tricks.

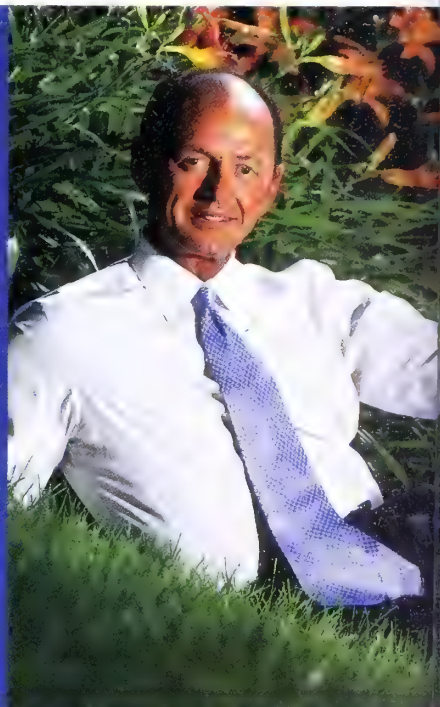
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- Bank loans, guaranteed by Consecro, are liberally given to senior executives to buy shares. More than \$420 million worth of bank loans are outstanding. Plus, the company loans money to pay the interest.



bonuses. Hilbert, who gets an annual bonus of 3% of the company's pretax profits, would get a severance "bonus" of more than \$70 million. Altogether, a takeover deal would give Consecro's top three executives more than \$590 million, about 6% of the company's market cap.

When the unique buyout options program was shown to various compensation experts, their reactions were telling: "Pass me the smelling salts," says Graef S. Crystal, a San Diego compensation expert and editor of *The Crystal Report*, after reading about the options in Consecro's 1998 proxy. "I've never seen anything like this before."

"This type of option package is unheard of," says Alan Johnson, managing

director of compensation firm John Associates in New York. "It's hard to justify it; it's bizarre. Essentially, the executives are double-dipping... they will make more money than the shares are even worth. I have never seen anything like this before. Obviously, management has an enormous incentive to sell this company because that's the only way they can receive more than the full value of their stock options."

INAPPROPRIATE EXPOSURE? When asked to confirm this option plan, Consecro spokesman James W. Rosensteele said that he would not be able to "give a detailed response" before *BUSINESS WEEK*'s deadline. He did say that the \$590 million figure was too high, but declined to provide a specific number.

"It's bizarre," says one compensation expert. "They will make more money than the shares are even worth"

real issue here is the long-term shareholder value that has been created by this management team," Rosensteele

ayout bonanzas don't exhaust Con-
s generosity to its executives. In
the company organized a program
tend and guarantee personal loans
igh Bank of America for its execu-
to buy Consecos stock.

top of that, Consecos is lending
y directly to employees to pay in-
t on those loans at a modest 6.5%.
nically, the bank has recourse to
the employees for the
borrowed amount.
But they have been
guaranteed by Con-
secos. Loan and inter-
est payments aren't
due until 2001.

While the bank
loans themselves
aren't highly unusual,
the amount is. So far,
\$428.7 million has
been lent to 175 top
employees (including
all the members of
the board of direc-
tors—and the outside
directors as well) to
buy stock. That
amounts to three-
quarters of last year's
net earnings of \$567
million. Hilbert has
borrowed over \$100
million, while Consecos
Executive Vice-Pres-
ident Ngaire E. Cu-

as borrowed about \$30 million and
M. Dick, chief financial officer,
than \$50 million.

of last December, Consecos itself
9.3 million for interest payments
e executive loans. If those loans
be lumped into Consecos's total
the amount would increase by
9%.

s one major shareholder, who
not to be named: "I think it is
questionable that the company
themselves on the hook for this
it for their officers to buy stock in
company. I don't think this is an
appropriate exposure for shareholders
e."

COLLATERAL? Consecos executives,
rse, could end up with an expo-
sion of their own. What hap-
f the stock, now about 33, really
Many of the stock purchases in
nd 1998 were made at around the
ge by such executives as Rollin
ck and Dennis E. Murray. Ac-

BROTHER, CAN YOU SPARE \$9 MILLION?

Early last October, di-
rectors of Advanced
Lighting Technologies
Inc., a Solon (Ohio) firm
that makes high-tech met-
al-halide lighting products
with \$86 million in sales,
found themselves in an
awkward mess. The mess
was cleaned up only be-
cause the board allowed
the CEO to use their
company as a private
piggy bank.

The problem: major
stock market losses
amassed by Wayne R.
Hellman, Advanced's chair-
man and CEO. Earlier this
year, Hellman set up a
margin account worth \$12
million with Prudential Se-
curities Inc. to diversify
his portfolio. As collateral, he offered
2.05 million shares of Advanced
stock, or about 10% of the total out-
standing shares.

HAPPIER NEWS. Then the market took
a dive. Advanced stock, in turn, sank
from a high of nearly \$30 a share
when Hellman set up the account, to
\$5.50 in September. On the way
down, Prudential insisted that Hell-
man meet his margin calls. But then
he would have had to cash in his Ad-
vanced shares, further depressing
their price. So, facing a crunch, Hell-
man's board lent him \$9 million at 8%
interest for one year; Hellman dutiful-
ly offered virtually everything he
owned as collateral, including all 4.7
million of his Advanced shares plus

cording to Johnson Associates, if the
stock falls back to below 22, as it did in
October, Dick's loan-related stock pur-
chases would be underwater by about
\$25 million. For Murray, the number
would be about \$21.5 million. For the
top 10 executives, it would be a loss of
about \$146 million, and that doesn't in-
clude interest. While the company in-
sists that the employees are ultimately
responsible for repaying the loans, what
happens if someone declares personal
bankruptcy?

Even if Consecos stock again falls
steeply, Bank of America won't be
knocking on the doors of Consecos em-



NO LIGHT MATTER: Hellman's use of options
as collateral forced the board to bail him out

his 12-room house. Explains Alan J.
Ruud, a company director who owns
more than 3 million Advanced shares
and who supported the loan: "It was
in everybody's interest.... Having 2
million shares on the market would
have tanked the stock."

The happy news is things are
looking up a bit: The stock is now at
\$8 a share. And Hellman has signed
up at his current job for five more
years—avoiding the possibility that
he might jettison his stock and run.
"He's a good executive," says Ruud.
But that remains to be seen. Ad-
vanced earnings have been weak and
clearly Hellman isn't much of an in-
vestment strategist.

By Peter Galuszka in Cleveland

employees asking for more collateral to
meet the margin calls. Rosensteele says
the loans do not stipulate the need for
more collateral if the stock declines be-
cause those loans are guaranteed by the
company.

While Rosensteele says Consecos's in-
centive plans promote "longtime share-
holder value," the incentive structure
at the company seems to be skewed
otherwise. Says Crystal: "I'd be sur-
prised if Hilbert isn't walking in front of
corporate headquarters today with a
billboard saying, 'Company for sale. In-
quire within.'"

By Debra Sparks in New York

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Tenzing Norgay, photographed by Sir Edmund Hillary, first summiting of Mount Everest, 1953.
Photo provided by Royal Geographical Society, London.

DID BEAR STEARNS IGNORE A STOCK SWINDLE?

The feds probe ties between the brokerage and a small firm charged with massive fraud

On Nov. 9, a federal grand jury in Manhattan handed up a 15-count securities fraud indictment that was daunting in its scope. Prosecutors charged that customers of Sterling Foster Inc., a major microcap broker, were ripped off by a cool \$100 million. The firm, they maintain, grossly overcharged purchasers of manipulated stocks between 1994 and 1997. Allegedly running the show from behind the scenes: a 1980s-era small-stock kingpin named Randolph K. Pace.

As detailed in the indictment, Pace did a number of things—getting capital and arranging deals, for example—in return for his piece of the action. And, according to a little-noticed charge in the 98-page indictment, Pace performed another vital function. The indictment maintains that the 53-year-old Pace helped “obtain a securities-clearing agreement for Sterling Foster with Bear Stearns Securities Corp.”

Did Randy Pace, the subject of numerous regulatory sanctions over the years, have a relationship with Bear Stearns that he was able to exploit on behalf of Sterling Foster? Was Bear Stearns, as Sterling Foster's clearing firm, aware of the alleged stock fraud scheme? These and other disturbing questions are being probed by the Securities & Exchange Commission and the Manhattan District Attorney's office. They are said to be exploring links between Pace, Bear Stearns clearing chief, Richard Harriton, and Harriton's son Matthew—who heads Embryo De-



Bear Stearns cleared trades for Sterling Foster, charged by prosecutors with reaping illegal gains of \$100 million

RICHARD HARRITON IS IN CHARGE OF CLEARING

velopment Corp., one of the allegedly Pace-manipulated firms. Regulators are also exploring

Bear Stearns's relationship with another defunct microcap broker, A. R. Baron (BW—Mar. 9, 1998).

The Bear Stearns-Sterling Foster ties already are being probed in yet another legal proceeding. Documents and testimony in an arbitration case against Bear Stearns, brought by a Sterling customer named Howard Greenberg, raise disturbing questions about Bear Stearns's role at Sterling Foster. The Greenberg arbitration involves one of the stocks

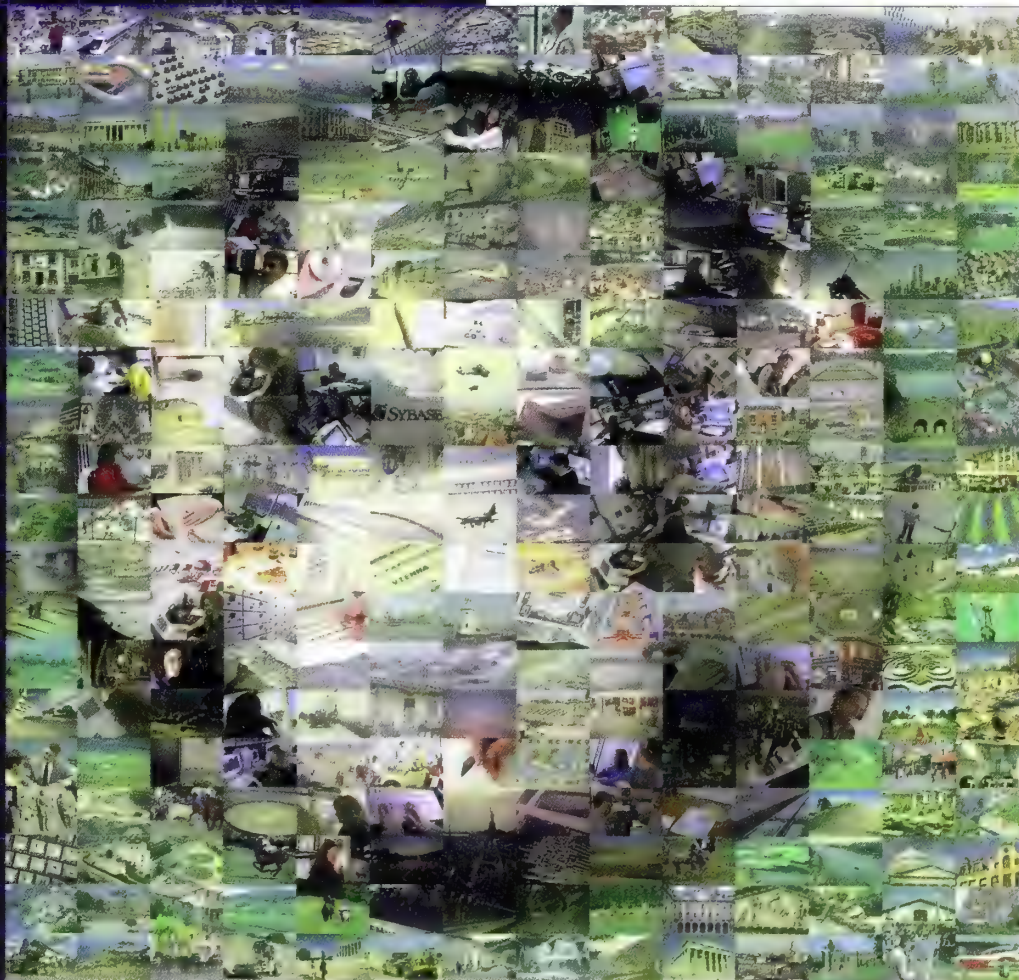
that was the subject of the Pace indictment, a Florida-based direct-marketing firm called ML Direct Inc. The indictment charges that ML Direct was run by Pace and an alleged Pace associate named in the indictment, Novich. ML Direct's former executive vice-president, Alan Kerzner, says he was not aware of any involvement by Pace. Attorneys for Pace and Novich both declined comment on the indictment, as did Sterling Foster's attorneys.

The indictment, and a civil suit filed Nov. 9 by the SEC, maintain that direct investors were ripped off by Sterling Foster in September, 1996. Prosecutors



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Security Symbol	Trade No.	M C
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HOWARD GREENBERG

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FROM: ADAM LIEBERMAN
DATE: SEPTEMBER 11, 1996
RE: ML DIRECT INC.

Please accept free delivery of 1,080,000 unrestricted shares and 900,000 Warrants of ML DIRECT INC vs. payment from our trading account #101-

I authorize you to pay Special Equities Inc. the sum of \$3,510,000.

Thank you.

say Pace and his associates used identical techniques to defraud investors in ML Direct and five other stocks. The feds maintain that Sterling Foster brokers sold millions of shares to its customers and then realized huge illegal profits by obtaining that stock at cut-rate prices. Greenberg, for example, paid \$14 a share for 14,000 shares of ML Direct, for a total of \$196,000. In papers filed with the Greenberg arbitration, his attorney, Leslie Trager, says the shares sold to Greenberg were obtained by Sterling Foster, a few days after the sale, for just \$3.25 a share. The difference—more than \$150,000—was Sterling Foster's profit. The shares are now trading at about 1½ cents.

VIGOROUS DENIAL. Greenberg maintains that Bear Stearns was fully aware of the scheme. For its part, Bear Stearns told the arbitrators it had "no knowledge of Sterling Foster's alleged profits." A series of memoranda provided to the arbitrators, however, appear to support the view that Bear knew at least the aggregate cost of the shares obtained by Sterling Foster. The memos were sent to Richard Primavera, a Bear Stearns official, from Sterling Foster Chief Executive Adam Lieberman at the time the cheap stock was delivered to Sterling Foster customer accounts at Bear Stearns. (Lieberman and two other alleged Pace associates, Michael Lulkin and Michael Krasnoff, pleaded guilty to related fraud charges and agreed to disgorge \$32 million in illegal profits.)

The memo above, for example, shows that 1.08 million shares and 900,000 warrants—each convertible into one share of stock—were being delivered for a mere \$3.5 million on Sept. 11, 1996. Sterling Foster's hapless customers had just paid more than \$15 million for the shares alone. The source of the shares, Special Equities, is described in the SEC complaint as controlled by alleged Pace

associate Lulkin. According to the SEC, Special Equities got those shares and warrants in 1995—and didn't pay a cent for them.

Bear Stearns may have another problem stemming from the cheap stock. Papers filed on behalf of Greenberg point out that an ML Direct prospectus said all the cheap stock was "restricted" and could not be legally traded for a year, and that there was no present intention to release the shares. Why, then, did Bear Stearns accept the stock? Bear Stearns calls the language in the prospectus "equivocal" and says that, in any event, it didn't know about it. Bear Stearns's associate director of clearing, Keith Brigley, testified that he read the paragraph describing the restrictions—but stopped in mid-paragraph and didn't get to that part. "I don't know if I did not care whether there were restrictions or no restrictions," said Brigley, "but Adam [Lieberman] told me he was going to be able to get the shares."

In papers filed in the arbitration, Greenberg has another explanation—and the indictment and SEC suit agree with him. They maintain that the restrictions, aimed at reassuring investors that vast quantities of stock would not swiftly come to market, were a sham. Greenberg asserts that Bear Stearns was aware of that, and thus was a participant in the alleged stock scam. In its own presentation to the arbitrators, Bear Stearns vigorously denies it was aware of illegal activity and that Bear "lacked the ability, obligation, or incentive" to find out about it.

What Bear Stearns does not deny, however, is a personal relationship between the accused stock scamster Randy Pace and Richard Harrington, Bear's head of clearing. Bear Stearns

RIPPED OFF?

Sterling Foster customer Howard Greenberg alleges Bear Stearns was fully aware of the smaller firm's scheme to charge customers high prices for cheap stock

said in a statement that Richard Harrington and Randy Pace have known each other since 1980 and "became friends in the late 1980s." Richard Harrington met Pace through "a relationship," was "introduced by Randy Pace to the management of Emery and hired as chief financial officer in 1996 by Lulkin, Pace's alleged accomplice. The Pace-Matthew Harrington relationship apparently remains close, according to the indictment, Pace's chief of offices on Manhattan's Lexington Avenue—the same suite occupied by Matthew Harrington, according to public records. Harrington, who became Emery's CEO in 1997, declined comment.

While conceding the Pace-Harrington relationship, Bear Stearns is quick to assert that it had its limits. Did anyone at Bear Stearns, including Harrington, know Pace controlled Sterling Foster? "Absolutely not," says a spokesman. And what about the allegation in the indictment that Pace helped obtain Bear Stearns clearing account for Sterling Foster? The reply: Bear Stearns followed its "normal procedures" in reviewing Sterling Foster's application. And "in the process of review, Randy Pace did offer an unsolicited recommendation of Sterling Foster." Arriving at a "recommendation" or the rejection of an unholy alliance between an accused stock scamster and a top official at Bear Stearns? Until that question is answered, the sins of Sterling Foster will continue to cast a pall over the distinguished firm that cleared its trading.

By Gary Weiss in New York

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BY GENE G. MARCIAL

LYNX IS POISED FOR A LEAP

When a small outfit signs a deal with a blue-chip giant, the stock of the small one usually takes a jump. But that's not what happened to Lynx Therapeutics (LYNX): Its shares hardly budged from 10¢ on Nov. 5, when it announced an agreement to provide DuPont exclusive access to its technologies for developing new varieties of corn, soybeans, wheat, and rice. The next day, Lynx slid from 10¢ to 9¢.

No matter, says Stanley Morten, chief operating officer at New York investment bank Punk, Ziegel. "The Street just doesn't get it," Morten says that the \$60 million DuPont pact signals that Lynx's technology is ready for commercialization—and further alliances.

Punk, Ziegel analyst Paul Boni thinks that another pact, with a big European drugmaker, will be signed soon—which will provide an "additional catalyst" for the stock, he says. One investment banker reports there is speculation that Britain's Glaxo Wellcome and Switzerland's Novartis are interested.

Lynx's technology is a new way to clone and handle gene fragments—"[perhaps] the greatest breakthrough in gene analysis technology since the 1960s," says Boni. It makes possible the rapid and simultaneous analysis of millions of DNA molecules. The technology has uses in genomics, such as gene sequencing, diagnostics, and polymorphism detection. The DuPont deal includes creation of genome maps to aid crop improvement. Hambrecht & Quist's Rachel Leheny, also a Lynx bull, says the technology has the "power to revolutionize the discovery of genes and gene functions."

Boni expects the company will move into the black in 2000, when he sees earnings of 62¢ a share. With more

than \$25 million in cash on its balance sheet and a market cap of just \$100 million, "Lynx remains an excellent value in the genomics group," says Boni, who figures the stock is worth 25 to 30 a share.

HEALTHSOUTH: OFF THE SICK LIST?

In 1998, many health-care stocks suffered acute attacks, from write-offs and losses. Six months ago, shares of Healthsouth (HRC) were flying, at 30 a share: By Oct. 7, they had tumbled to 7½¢. In September, many big stakeholders, including Fidelity Investments, dumped a big chunk of their stakes in the No. 1 company in outpatient surgery and rehab services.

Enter the hardy, health-care investment pros, who have started buying—including David Talbot, managing director of Health/Vest Advisors. "This is the time to buy," Talbot insists. By Nov. 10, Healthsouth had risen to 12¢.

Back in early September, Healthsouth stock dropped when analysts cut their earnings estimates. True enough, the company conceded on Sept. 30 that earnings growth would slow—from 30% a year to about 15% to 20%—mainly because the managed-care companies were pressuring their service providers for lower rates.

Talbot points out that Healthsouth, at its current depressed price, is a very compelling buy—based just on its projected 15%-to-20% earnings growth. Some analysts reinstated their buy ratings when third-quarter earnings came up to expectations. Talbot says that, at its price-earnings ratio of about 9, based on 1999 estimated earnings of \$1.10, the stock is "definitely cheap."

Joseph Chiarelli, an analyst at J.P. Morgan Securities, who rates the stock a buy, figures that Healthsouth will generate 1999 cash flow of \$1.4 billion. After funding internal growth and capital expenses, the company should have free cash flow of \$100 million to \$200 million, he figures.

A GENE GENIUS BIDES ITS TIME



LOOKING PEAKED FOR A SPELL



TOPS WITH THE SHORTBUSTERS

The shortbusters are back—the ShortBusters Club, that is. Founded in 1990 by maverick money pro R. Dirks, the ShortBusters have duelled with such daring short-sellers as the Fesbach Brothers group, by recommending and buying up shares that the Fesbachs were shorting. After being low for years, the ShortBusters

NOW UNDER ATTACK

STOCK	NOV. 11 PRICE	52-WK HIGH-LOW	12-MO. TARGET
ORG	\$12½	\$37½-\$7½	\$35
HEB	8½¢	13½¢-2¢	16

DATA: BLOOMBERG FINANCIAL MARKETS, SHORTBUSTERS

are back in business, says Dirks—w so many stocks "under siege, in many cases unfairly and unjustifiably."

Heading the list of heavily shorted stocks that Dirks's crew is defending is Organogenesis (ORG), which plummeted from 37 in late April to 12½¢, and Hemispherx BioPharma (HEB), which fell from 12½¢ on Sept. 9 to 5¢ on Sept. 10. Hemispherx is now back above 8¢.

Both stocks have been featured in this magazine. Organogenesis was mentioned on Aug. 5, 1996, and Hemispherx was highlighted in this column on Sept. 28, 1998, when it was reported that the shorts called its lead product, Ampligen, unsafe and defective. "They're wrong," says Dirks.

Demand for its Apligraf, a human skin equivalent, has been strong, and orders are up, with more expected, Dirks says. Hemispherx is within years of commercializing a new class of drugs for chronic viral disorders. Ampligen is in Phase 3 of clinical trials for the treatment of chronic fatigue syndrome, with patients paying the cost of the drug. Says Dirks: "If the drug was unsafe, the FDA would have permitted its use in this manner." Hemispherx, he says, aims to develop an oral version of Ampligen called Oragen, as well as other products for treating viral, immune deficiency, and cancerous conditions.

Whether or not the ShortBusters will be able to rescue these stocks remains to be seen. Meanwhile, the battle is

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AND YOU THOUGHT LAST QUARTER WAS BAD

Asia's woes—and resulting cheap imports and lost sales—drag U.S. profits down further

For months, Corporate America braced for a Pacific tsunami. And in the summer, it crashed ashore. From razors to polyester to paper, U.S. producers saw sales disappear in Asian markets and prices sag at home in the face of cheap imports.

The bottom line: Profits for the 900 companies on BUSINESS WEEK's Corporate Scoreboard dropped 4% in the third quarter from a year earlier, on a 7% sales rise. That contrasts with a 9% net-profit gain in the corresponding quarter of 1997, and it marks the worst perfor-

mance since the final three months of 1995. On the operating level, they weren't much better: Even without time charges and special gains, profits for the Scoreboard companies fell. "In the third quarter, the profits really became clear-cut," says Allen Sinai,

Winners and Losers in Quarterly Profits

INDUSTRIES

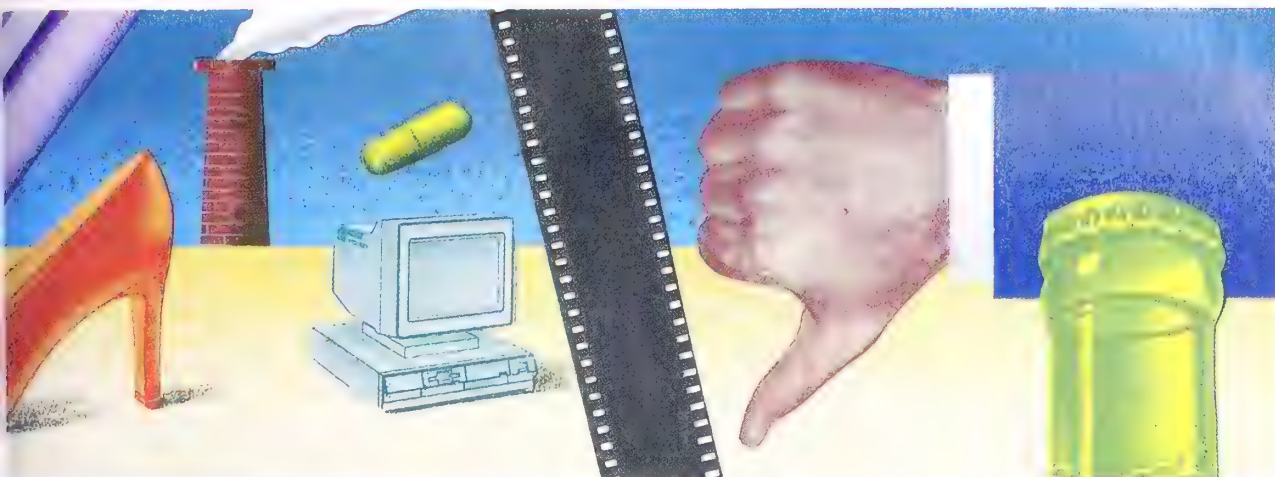
COMPANIES

LEADERS		LAGGARDS		WHO MADE THE MOST		WHO LOST THE MOST	
PERCENTAGE CHANGE FROM 1997'S THIRD QUARTER		PERCENTAGE CHANGE FROM 1997'S THIRD QUARTER		MILLIONS OF DOLLARS		MILLIONS OF DOLLARS	
SAVINGS & LOANS	817%	PETROLEUM SERVICES	LOSS	GENERAL ELECTRIC	\$2,284	MCI WORLDCOM	-\$2,940
APPLIANCES & HOME FURNISHINGS	629	GAS UTILITIES	LOSS	AT&T	2,096	GENERAL MOTORS	-80
AEROSPACE & DEFENSE	302	TELECOMMUNICATIONS	LOSS	PHILIP MORRIS	1,980	DUPONT	-56
COMPUTER SOFTWARE & SERVICES	81	FOREST PRODUCTS	LOSS	LIMITED**	1,684	BAKER HUGHES	-53
AUTO PARTS	75	CONSTRUCTION & ENG.	LOSS	MICROSOFT	1,683	HALLIBURTON	-52
RETAILING	70	ELECTRONICS	-74%	INTEL	1,559	BANKERS TRUST	-48
TEXTILES	58	CARS & TRUCKS	-63	IBM	1,494	NEXTEL COMMUNICATIONS	-40
BUILDING MATERIALS	55	CHEMICALS	-59	EXXON	1,400	LSI LOGIC	-28
ALUMINUM	53	MISCELLANEOUS METALS	-52	MERCK	1,367	SONAT	-25
BUSINESS MACHINES & SERVICES	47	DRUG DISTRIBUTION	-49	SBC COMMUNICATIONS	1,207	NORTHWEST AIRLINES	-22
BANKS-MIDWEST	40	COAL, OIL & GAS	-48	PROCTER & GAMBLE*	1,167	WESTERN DIGITAL	-19
PUBLISHING	37	SEMICONDUCTORS	-45	COX COMMUNICATIONS	1,067	CADENCE DESIGN SYSTEMS*	-19
TOBACCO	36	GENERAL MANUFACTURING	-42	WAL-MART STORES**	1,034	LOUISIANA-PACIFIC	-19
PRINTING & ADVERTISING	36	GLASS CONTAINERS	-37	FORD MOTOR	1,001	MCN ENERGY GROUP	-17
HEALTH-CARE SERVICES	33	BANKS-SOUTH & SOUTHEAST	-33	FIRST UNION	995	GUIDANT	-17

DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE MCGRAW-HILL COMPANIES

*FISCAL FIRST QUARTER

**FISCAL SECOND QUARTER



l economist for Primark Decision omics.

e misery extended far and wide. A if crude oil cut earnings 48% in the oil, and gas industry. Another type ercapacity, in computer chips, sent onductor profits down 45%. Surging ts of cheap steel chopped profits at industry by 22%.

KING MARGINS. Profit margins were t in a vise of falling prices and ris- ages, which were up 3.7% from a earlier. Average margins for the mpanies shrank to 5.6% from 6.2% evious year. Worse, that's the first since mid-1994 that margins have ed below 6% for two quarters in a and there were signs that the slow- might stick around for a while. gross domestic product grew 3.3%, from the 3.7% pace of the first or 1999, BUSINESS WEEK's econo- project a GDP gain of just 2%.

biggest individual money-loser last r was MCI WorldCom Inc., which ed a staggering \$2.9 billion because te-offs it took to merge MCI Com- ations Corp. and WorldCom Inc. ut the MCI WorldCom loss, the oard profits would have been down 3%. General Motors Corp., which ed an \$809 million net loss after a \$1.2 billion hit on two summer s, also skewed the overall figures. ven without the strikes and a loss sale of some parts businesses, GM have reported 28% lower earn- he culprits included economic prob- n Latin America and higher costs tching over to a new generation ks.

rest of Detroit's Big Three fared etter. In part, that's because Ford hrysler are ahead of GM in cost- g. But their new trucks are also y racking up sales. Chrysler Corp., last release before merging with er Benz AG, boosted profits 55%,

to \$682 million, on sales up 16%, thanks largely to its Dodge Durango. And though Ford Motor Co.'s net income fell 11%, to \$1 billion, on sales down 10%, sharply lower costs lifted operating earnings 10%.

A closer look at a couple of multina- tionals shows the breadth of the overseas woes. DuPont Co.'s net losses swelled to \$564 million, more than double a year earlier. While DuPont was hurt by a \$1.3 billion charge related to the purchase of a drug joint venture, its fibers sales also were slammed by cheap Asian imports. Likewise, Gillette Co. was nicked by weak foreign markets, high costs for its new Mach3 razor, and a \$535 million restructuring charge. In the quarter, net in-

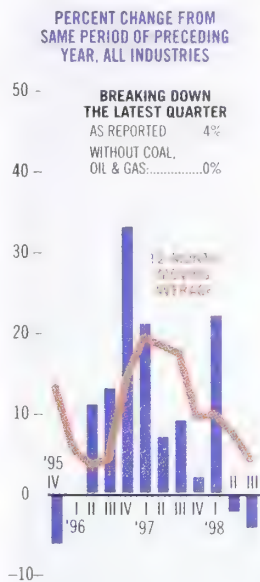
come fell to \$6 million from \$437 million in 1997. CEO Alfred M. Zeien says this global downturn is "different from any- thing we've experienced in the last 20 to 30 years."

Despite the tough environment, some companies managed to score big gains. General Electric Co. led the profitability pack yet again, recording earnings of \$2.28 billion, up 13%. It combined relent- less cost-cutting with strong sales in many of its units. AT&T, meanwhile, cut 15,000 employees and nearly doubled profits, to \$2.1 billion, on only a 4% in- crease in sales. Another bright spot: Wireless sales surged 19% on the success of AT&T's Digital One Rate plan.

Many companies found a haven in still-

A Spotlight On Third-Quarter Profits

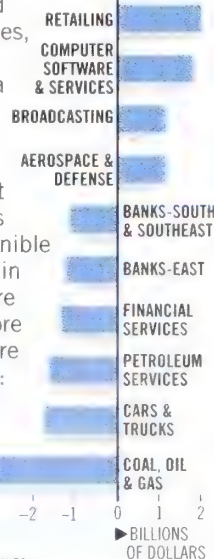
AFTERTAX PROFITS QUARTER BY QUARTER



INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

Poor quarter or not so bad? Profits were down 4%, while sales main- tained a 7% increase for the third quarter in a row. In many industries, specific companies stand out as heroes—or villains. Retailing was a big winner this quarter, but much of that was due to The Limited's split-off of Abercrombie & Fitch. Cars & Trucks were big losers, but the strike at General Motors bears most of the blame. A more discernible industrywide pattern was evident in the Coal, Oil & Gas industry, where only 2 of 25 companies made more money than a year ago. In Software & Services, the opposite was true: 22 of 28 companies did better. The overall result still comes up weak. Couple that with shrink- ing margins and declining return on equity, and there's little reason for cheer.

CHANGE IN AFTERTAX PROFITS FROM 1997

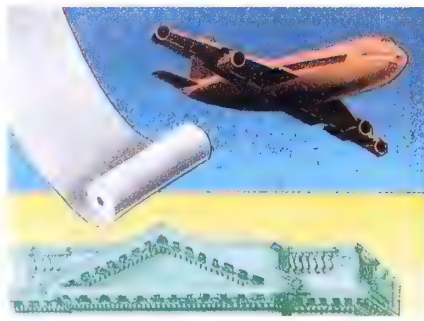


DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE MCGRAW-HILL COMPANIES

Corporate Scoreboard

exuberant U.S. consumers. Consumer spending grew at 3.9%—down from the galloping 6.2% pace of last summer, but still robust. Shoppers displayed an increasing tendency to spend wisely. Thus, while retailers' profits grew 70%, much of the hottest action was in discount stores. Kmart Corp. pushed profits up 158% to \$80 million, thanks in part to cost-cutting. Sales increases were thin—only 3% total—but spread across apparel, pharmacy, and other product lines.

With most companies facing a pricing squeeze, the push was on to boost productivity. That meant more investment in computers and software. Software sales jumped 24%, while profits gained 81%. Microsoft Corp. again led the pack, driving sales up 26% but posting an even more impressive 154% increase in profits, to \$1.68 billion. Strong sales of Windows 98 helped, but the gain also reflects a \$296 million write-off taken a



year ago to buy WebTV Networks Inc.

The turmoil in overseas financial markets cut a chunk out of several big brokerages and banks. BankAmerica Corp., the coast-to-coast operation formed by the merger of NationsBank Corp. and the old BankAmerica, said its earnings were dragged down by a \$529 million trading loss, mainly in Russia, and a \$372 million charge-off to cover its investment in D.E. Shaw & Co. Citigroup, the com-

bination of Citicorp and Travelers Group reported its Salomon Smith Barney kerage arm took an aftertax loss of \$1 million on global arbitrage and Russian-related credit losses. Travelers' net income—reported separately for the quarter—fell 81%, on 17% lower revenue. Russian trading losses also battered Bankers Trust Corp., with a net loss of \$488 million.

Of course, if the stock market continues to rebound, consumers may gain enough confidence to save Christmas and pull profits out of the slump. Interest-rate cuts by the Federal Reserve could help. And the respite from a weaker dollar should also make U.S. goods more competitive overseas. But executives have learned that overseas woes aren't going away anytime soon.

By Steven V. Brull in Los Angeles
with bureau reports

EUROPE COULD BE THE BRIGHT SPOT FOR '99

A tightening labor-cost squeeze. Plunging Asian demand. Little pricing power. Is there any oasis for U.S. corporations stuck in a profit's desert?

Try Europe, say some analysts. Demand across the Atlantic should at least match that of the U.S. in the coming year, and a falling dollar is expected to continue giving a lift to earnings brought back home. Moreover, the good news should carry farther than most, since Europe, which takes a quarter of all U.S. exports, is the biggest market for U.S. companies. Among the industries most likely to benefit: paper, information technology, and management consulting.

"RARE MOMENT." Certainly the fundamentals argue that Europe will be better off than most overseas markets for multinationals in 1999. For starters, Europe is set to grow at about the same pace in 1999 as the U.S. will. According to Goldman, Sachs & Co., the 11 nations who will adopt the euro in January should see their collective real gross domestic product increase by 2.1% in 1999. That should match U.S. growth, as projected by a survey by *Blue Chip Economic Indicators*. Both forecasts show economic activity slower than in 1998, but as Robert J. Barbera, chief economist of investment firm

Hoening & Co., says, "We will enjoy a rare moment when Europe will match or surpass U.S. growth."

Granted, some expectations have been trimmed back in recent weeks, particularly in Germany. The election of Chancellor Gerhard Schröder in September scared many German business leaders, who don't expect much tax relief under his government. Combined with the impact there of Asia's problems, that's expected to hold German GDP to 1.7% growth next year, says Goldman Sachs.

Compared with the rest of the world, though, Europe is still a good customer. Global shipments of personal computers to Europe in the third quarter surged 22% from a year ago, while sales everywhere else rose just 9%, says market researcher International Data Corp. And with airlines such as United and Northwest Airlines Corp. shifting seats from Asian routes to Atlantic flights, total capacity over the Atlantic should increase 12% to 15% this year. Overall, U.S. merchandise exports to Europe have grown 4.6%

so far in 1998, even as shipments to the rest of the globe fell 2%.

In addition, multinationals should get a boost to their bottom lines if, as many expect, the dollar declines further against European currencies (chart). Since early April, the greenback is down 10% against both the German mark and the French fran-

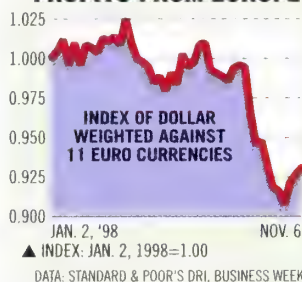
Expected interest-rate cuts in the U.S. suggest the dollar will slip further while the euro is introduced. Those declines lift the value of profits originating in Europe when companies exchange marks and francs into dollars.

The currency translations won't entirely offset the falloff in Asian earnings,

they may soften the blow. Even if the dollar were to stabilize at current levels in 1999, B. Alex Henderson of Prudential Securities Inc. notes that companies should get as much as a 5% boost when European earnings are turned into dollars. And with overall profits expected to show little growth at all next year, companies will welcome positive news anywhere they can get it.

By Kathleen Madigan in New York

A WEAK DOLLAR LIFTS PROFITS FROM EUROPE



Third Quarter 1998

CORPORATE SCOREBOARD

Sales

Includes all sales and operating revenues. For companies that do not include all operating revenues, see the "Notes" section.

TS: Net income before extraordinary items. For banks,

profits are net income after security gains or losses.

MARGINS: Net income from continuing operations before extraordinary items as percent of sales.

RETURN ON COMMON EQUITY: Ratio of net income available

for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, and retained earnings.

PRICE-EARNINGS RATIO: Based on Oct. 30, 1998, common-

stock price and corporate earnings from continuing operations before extraordinary items for most recent 12-month period.

EARNINGS PER SHARE: For most recent 12-month period. Includes all common-stock equivalents.

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30	12 MONTHS' EARNINGS PER SHARE
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %			
INDUSTRY COMPOSITE	1556185.6	7	4564361.7	8	87646.3	-4	281145.4	4	5.6	6.2	15.5	27	1.84
AEROSPACE & DEFENSE													
INDUSTRY COMPOSITE	32140.4	7	96704.8	7	1484.8	302	3672.6	15	4.6	1.2	6.8	49	1.09
BOEING	12717.0	12	39047.0	15	347.0	NM	655.0	105	2.7	NM	1.2	NM	0.16
LOCKHEED DYNALICS	1172.0	19	3504.0	18	94.0	15	268.0	15	8.0	8.3	17.0	22	2.77
BOEING (B.F.)	986.2	13	2934.9	18	59.7	60	169.8	29	6.1	4.3	10.1	18	2.00
BOEING AEROSPACE	626.2	35	1686.6	24	64.7	-46	160.8	-19	10.3	25.7	186.8	16	2.71
BOEING INTERNATIONAL	331.6	7	995.7	5	38.1	80	90.0	52	11.5	6.9	27.5	15	0.97
BOEING MARTIN	6349.0	-4	19086.0	-5	318.0	-4	876.0	-6	5.0	5.0	-9.8	NM	-2.79
BOEING NEWS SHIPBUILDING	462.0	9	1325.0	4	17.0	NM	49.0	75	3.7	0.2	-13.0	NM	-0.81
BOEING GRUMMAN	2213.0	-4	6366.0	-4	116.0	18	197.0	-32	5.2	4.3	10.9	18	4.54
BOEING CASTPARTS (9)	363.4	14	1088.6	18	25.3	22	74.0	30	7.0	6.5	15.4	11	3.90
BOEING STRAND	498.0	15	1473.0	17	57.0	4	165.0	24	11.4	12.7	43.5	12	3.82
BOEING TECHNOLOGIES	6422.0**	7	19198.0	4	348.0	16	968.0	17	5.4	5.0	27.0	20	4.87
AUTOMOTIVE													
INDUSTRY COMPOSITE	98751.0	-7	320618.5	-3	1494.1	-52	27081.5	97	1.5	2.9	48.5	6	8.97
TRUCKS & TRUCKS													
INDUSTRY COMPOSITE	85343.7	-9	280025.9	-5	1020.6	-63	25405.9	106	1.2	2.9	55.1	5	10.80
CHRYSLER	14482.0	16	47322.0	13	682.0	55	2737.0	40	4.7	3.5	27.2	9	5.41
FORD MOTOR	32640.0	-10	106513.0	-6	1001.0	-11	21028.0	310	3.1	3.1	95.7	3	18.39
GENERAL MOTORS	34423.0**	-18	114895.0	-11	-809.0	NM	1184.0	-76	NM	2.5	19.5	16	3.84
RAMMO INTERNATIONAL (2)	1860.0	18	5605.0	28	50.0	43	155.0	94	2.7	2.2	26.2	7	2.88
RAMMO	1938.7**	13	5690.9	17	96.6	17	301.9	42	5.0	4.8	25.9	8	5.54
ARTS & EQUIPMENT													
INDUSTRY COMPOSITE	9735.0	20	29789.5	19	258.5	75	991.2	25	2.7	1.8	17.7	14	2.32
BOEING INDUSTRIES	573.8	4	1810.5	3	16.8	24	58.0	22	2.9	2.5	13.7	13	3.11
WARNER AUTOMOTIVE	431.6	6	1347.6	4	17.3	-20	62.9	-17	4.0	5.3	12.6	12	3.79
BOEING DIESEL	2962.4	3	9431.8	5	98.3	NM	399.1	96	3.3	NM	21.9	13	3.18
BOEING MOGUL	543.0	4	1688.1	5	-2.4	NM	17.7	-20	NM	1.6	7.0	17	1.03
BOEING (1)	1121.2	164	2993.2	115	34.6	99	55.8	-7	3.1	4.1	19.4	40	1.34
BOEING (1)	461.4	17	1258.8	12	17.3	-14	51.5	-55	3.7	5.1	23.2	13	1.75
BOEING LEMMERZ INTERNATIONAL (11)	383.0	38	1168.8	56	7.5	60	34.2	NM	2.0	1.7	24.8	25	1.06
BOEING (10)	1946.5	19	6153.6	18	21.6	-41	134.6	-4	1.1	2.2	15.5	11	2.97
BOEING INDUSTRIES (10)	578.5	9	1737.9	8	20.9	-24	72.1	-11	3.6	5.2	15.6	10	1.54
BOEING TECH†	399.5	80	1233.7	79	16.8	-57	79.4	-17	4.2	17.4	38.2	10	1.84
BOEING SH NATIONAL	334.1	36	965.5	67	9.8	95	26.0	197	2.9	2.1	9.5	12	1.46
RE & RUBBER													
INDUSTRY COMPOSITE	3672.3	-3	10803.1	-3	215.0	0	684.4	11	5.9	5.7	16.0	13	3.16
GOODYEAR TIRE & RUBBER	480.6	0	1379.9	4	30.0	4	88.9	1	6.2	6.5	14.6	11	1.58
GOODYEAR TIRE & RUBBER	3191.7	-3	9423.2	-4	185.0	0	595.5	13	5.8	5.6	16.3	14	3.95

d quarter ended Aug. 31. (2) Third quarter ended July 31. (3) Fourth quarter and most recent nine months ended Sept. 30. (4) Fourth quarter and most recent nine months ended Aug. 31. (5) Fourth quarter and most recent nine months ended July 31. (6) First quarter and most recent nine months ended Sept. 30. (7) First quarter and most recent nine months ended Aug. 31. (8) First quarter and most recent nine months ended July 31. (9) Second quarter and most recent nine months ended Sept. 30. (10) Second quarter and most recent nine months ended Aug. 31. (11) Second quarter and most recent nine months ended July 31. *Sales include other income. **Sales include excise taxes and other income. †Revenues from major subsidiaries not included in consolidated sales. Earnings per share are for latest 12 months, essentially for end of most recent fiscal year; they include all common-stock equivalents but exclude extraordinary items. ‡Citicorp and Travelers Group merged 10-8-98, forming Citigroup. †Proffitt's and Saks is merged 9-17-98, forming Saks Inc. NA = not available. NM = not meaningful.

DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE MCGRAW-HILL COMPANIES

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 \$	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 \$	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 \$	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 \$	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
INDUSTRY COMPOSITE	86463.8	4	262749.7	13	8747.7	-13	30947.8	0	10.1	12.1	14.0	18
(A) BANKS - EAST												
GROUP COMPOSITE	37325.6	1	115943.2	9	2733.4	-31	11698.0	-6	7.3	10.7	12.7	17
BANK OF NEW YORK	1478.0**	4	4295.0	3	301.0	10	879.0	9	20.4	19.2	23.4	21
BANKBOSTON	1794.7	5	5568.8	12	105.0	-53	585.2	-9	5.9	13.2	17.1	14
BANKERS TRUST	2526.0**	-22	9353.0	5	-488.0	NM	-102.0	NM	NM	7.6	2.8	NM
CHASE MANHATTAN	7627.0	-3	24243.0	7	837.0	-15	2636.0	-7	11.0	12.5	15.3	15
CITICORP†	9372.0	6	28306.0	10	530.0	4	2692.0	6	5.7	5.8	2.6	NA
FIRST MARYLAND BANCORP	351.2	-13	1160.5	30	40.1	-25	183.2	48	11.4	13.3	10.4	NA
FLEET FINANCIAL GROUP	2772.0	19	7387.0	13	401.0	14	1117.0	8	15.6	16.3	16.5	16
MBNA	1346.7	19	3735.4	13	216.6	26	538.0	24	16.1	15.2	33.7	25
MELLON BANK	1448.0**	10	4276.0	14	218.0	12	648.0	13	15.1	14.8	19.0	19
MORGAN (J.P.)	4293.0**	-7	14185.0	7	156.0	-61	874.0	-27	3.6	8.9	10.2	17
PNC BANK	2030.2	17	5784.7	13	280.6	7	830.3	6	13.8	15.1	18.7	14
REPUBLIC NEW YORK	731.3	23	2657.3	-3	-92.7	NM	143.7	-57	NM	11.9	7.6	19
STATE STREET	1113.0**	24	3116.0	25	111.0	10	325.0	16	10.0	11.3	19.7	24
SUMMIT BANCORPORATION	642.6	9	1875.4	7	117.9	66	348.8	35	18.3	12.1	17.5	15
(B) BANKS - MIDWEST												
GROUP COMPOSITE	19954.2	6	58662.5	10	3123.5	40	8703.4	25	15.7	11.9	17.7	17
BANK ONE	3748.0	1	11182.0	7	648.0	39	1683.0	82	17.3	12.5	18.2	16
COMERICA	791.7**	-2	2400.4	2	154.5	13	449.3	15	19.5	16.9	21.3	25
FIFTH THIRD BANCORP	669.4	9	1977.9	10	144.1	11	326.1	-4	21.5	19.3	13.9	41
FIRST CHICAGO NBD	2664.0	3	8020.0	7	405.0	5	1196.0	5	15.2	14.9	18.4	NA
FIRSTAR	504.2**	6	1467.7	6	81.5	8	231.1	5	16.2	15.9	17.2	27
HUNTINGTON BANCSHARES	619.9	4	1828.7	5	88.8	115	270.6	34	14.3	6.9	16.9	17
KEYCORP	1807.0	6	5242.0	8	252.0	7	736.0	10	13.9	13.8	17.7	14
MARSHALL & ILSLEY	546.2	22	1622.8	26	80.2	24	217.9	20	14.7	14.4	13.3	19
MERCANTILE BANCORPORATION	759.1	6	2208.1	21	63.1	373	285.2	102	8.3	1.9	11.7	18
NATIONAL CITY	2090.5	4	5973.1	12	344.5	22	779.4	-6	16.5	14.0	14.1	18
NORTHERN TRUST	667.3**	11	1934.6	15	90.2	11	262.3	15	13.5	13.5	19.3	25
NORWEST	2759.5**	13	8089.1	13	392.9	15	1142.7	15	14.2	14.0	20.2	19
OLD KENT FINANCIAL	340.7	4	1085.1	7	49.7	14	145.9	6	14.6	13.3	19.5	22
U.S. BANCORP	1986.7	14	5681.0	11	329.1	NM	978.2	78	16.6	NM	21.3	21
(C) BANKS - SOUTH & SOUTHEAST												
GROUP COMPOSITE	25308.7	5	76578.7	25	2297.5	-33	8942.7	-10	9.1	14.2	13.2	20
BANKAMERICA	12013.0	-4	38484.0	38	374.0	-78	4003.0	21	3.1	13.8	11.6	19
BB&T	760.1	5	2228.7	10	127.2	92	365.3	35	16.7	9.1	17.0	22
FIRST AMERICAN	452.4	10	1317.1	10	54.9	9	136.0	-22	12.1	14.7	11.2	20
FIRST TENNESSEE NATIONAL	556.2**	32	1499.2	28	61.8	13	160.9	15	11.1	13.0	22.2	19
FIRST UNION	5735.0**	21	15193.0	15	995.0	33	2034.0	-5	17.4	15.8	14.9	20
POPULAR	485.0	6	1425.1	13	57.6	7	169.8	10	11.9	11.7	14.3	19
REGIONS FINANCIAL	771.6	14	2276.5	16	51.2	-52	294.7	-4	6.1	15.9	10.4	18
SOUTHTRUST	755.4	17	2170.1	18	94.7	21	270.6	20	12.5	12.2	13.3	17
SUNTRUST BANKS	1278.0	9	3796.5	12	188.8	12	554.7	12	14.8	14.4	13.9	20
SYNOVUS FINANCIAL	334.7**	8	972.5	9	47.4	10	132.9	12	14.2	13.9	18.8	35
UNION PLANTERS	678.5	2	1999.6	4	17.5	-82	188.1	-33	2.6	14.8	10.6	28
WACHOVIA	1488.9	12	4411.4	13	227.4	14	632.6	7	15.3	15.0	13.6	30
(D) BANKS - WEST & SOUTHWEST												
GROUP COMPOSITE	3875.4	4	11565.3	4	593.2	16	1603.7	11	15.3	13.7	11.2	21
FIRST SECURITY	481.3	19	1393.4	23	63.1	13	180.4	15	13.1	12.9	15.3	16
PACIFIC CENTURY FINANCIAL	329.1	4	986.9	8	34.8	-1	72.0	-32	10.6	11.1	9.0	16
UNIONBANCAL	661.0	4	1960.0	6	148.3	14	571.4	11	22.4	12.4	15.4	12
WELLS FARGO	2404.0	1	7225.0	5	447.1	20	995.9	17	14.4	12.1	12.9	25
INDUSTRY COMPOSITE	27395.2	-3	85060.9	-3	556.5	-59	5903.8	-18	2.0	4.8	15.7	24
AIR PRODUCTS & CHEMICALS (3)	1250.3	3	3684.2	8	117.7	19	386.3	17	10.2	8.9	20.8	15
CABOT (3)	379.0	-5	1212.3	-2	19.4	104	90.2	33	5.1	2.4	17.3	17
CROMPTON & KNOWLES	442.8	-3	1394.3	-2	30.6	23	102.3	23	6.9	5.5	192.5	11
CYTEC INDUSTRIES	358.1	16	1092.1	17	27.0	-4	92.7	12	7.5	9.1	30.1	9
DOW CHEMICAL	4314.0**	-11	14000.0	-8	315.0	-26	1164.0	-20	7.3	8.7	19.4	14
DUPONT	6042.0***	4	18668.0	3	-564.0	NM	867.0	-36	NM	NM	12.8	59
EASTMAN CHEMICAL	1131.0**	-1	3444.0	-2	80.0	-17	251.0	-3	7.1	8.4	14.1	17
FERRO	334.4	-1	1022.2	-2	16.8	9	52.2	NM	5.0	4.5	29.8	16
FULLER (H.B.) (1)	333.5	3	986.1	3	-10.3	NM	7.0	-75	NM	3.3	5.8	29
GEON	328.0	8	983.2	5	6.2	-42	16.8	-12	1.9	3.5	8.9	26
GRACE (W.R.)	380.3	2	1091.0	-2	26.3	69	63.6	-41	6.9	4.2	14.4	32
GREAT LAKES CHEMICAL	340.5	10	1077.1	9	1.2	-96	56.4	-36	0.4	9.4	3.6	62

PORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30	12 MONTHS' EARNINGS PER SHARE
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998	3RD QUARTER 1997			
Q (M.A.)	564.5	1	1751.7	7	-0.1	NM	28.2	-42	NM	3.0	8.1	15	0.96
JLES	510.0	14	1385.0	-4	71.0	-13	173.0	-35	13.9	18.3	35.8	14	2.41
LOBAL	756.8	26	2655.4	15	37.8	42	172.8	12	5.0	4.5	5.2	33	0.80
NATIONAL FLAVORS & FRAGRANCES	349.8	-2	1088.5	-3	50.2	-11	168.8	-8	14.4	15.9	21.5	20	1.89
ZOL	404.0	6	1210.4	-3	16.6	-57	86.2	31	4.1	9.0	14.3	14	2.06
ELL CHEMICAL†	566.0	-29	566.0	-76	-15.0	NM	79.0	-66	NM	12.8	21.4	10	1.64
NNIUM CHEMICALS	408.0	-50	1215.0	-50	32.0	-54	124.0	-28	7.8	8.6	9.1	13	1.81
ANTO	1986.0	15	6500.0	14	-100.0	NM	353.0	22	NM	NM	7.6	71	0.57
ON INTERNATIONAL (6)	600.0**	-2	1890.1	0	45.4	-16	141.5	-18	7.6	8.9	13.2	16	1.54
I CHEMICAL	408.4	10	1178.5	11	40.7	-8	120.7	1	10.0	11.9	23.9	15	2.13
	582.0	-4	1768.2	-3	-7.2	NM	70.5	-40	NM	6.3	12.6	13	2.17
UR	1201.0	1	3636.0	3	108.0	1	318.0	1	9.0	9.0	18.5	16	2.55
& HAAS	909.0**	-7	2836.0	-7	89.0	-2	378.0	21	9.8	9.3	26.6	13	2.57
TA	703.0	-6	2168.0	-3	58.0	4	194.0	6	8.3	7.5	NM	14	1.62
INDUSTRIES	462.7**	-7	2187.6	2	21.8	NM	10.5	-93	NM	13.6	7.4	9	0.79
CARBIDE	1350.0	-19	4370.0	-12	76.0	58	336.0	-36	5.6	10.9	19.5	11	3.45
STRY COMPOSITE	42578.1	8	126830.0	10	3276.0	19	9282.4	13	7.7	7.0	21.6	30	2.25
HENY TELEDYNE	927.1	-6	2948.4	-3	65.5	11	167.9	-30	7.1	7.5	19.3	15	1.33
ISIGNAL	3741.0	2	11256.0	7	329.0	13	979.0	14	8.8	8.0	26.8	17	2.25
ER INTERNATIONAL	804.5	11	2336.4	13	10.9	-4	48.8	49	1.4	1.6	14.6	12	1.31
	343.5	-4	1055.7	-2	15.4	11	81.5	711	4.5	3.9	26.2	11	2.21
AL ELECTRIC	24136.0**	10	71832.0	12	2284.0	13	6625.0	13	9.5	9.2	25.2	33	2.69
JURT GENERAL (2)	1161.7**	10	3099.1	15	110.8	NM	79.1	NM	9.5	NM	9.8	40	1.21
OFFICE SOLUTIONS (3)	1428.1	2	4254.4	7	-61.7	NM	-120.0	NM	NM	2.4	8.6	NM	-0.76
	441.1**	-5	1298.4	-3	28.2	14	66.9	21	6.4	5.3	15.6	16	1.69
5)	301.8	4	849.9	3	39.7	-8	75.2	50	13.2	14.9	12.2	34	0.75
AY	344.5	12	974.2	15	17.0	233	23.0	-13	4.9	1.7	8.0	24	0.97
ARK INTERNATIONAL	698.5	16	1990.2	14	38.7	14	94.9	14	5.5	5.6	12.2	18	1.79
CO	1915.0	5	5720.0	7	103.0	-2	315.0	11	5.4	5.7	15.3	13	2.31
ON	2352.0**	15	7088.0	12	108.0	19	323.0	19	4.6	4.5	16.3	20	3.63
	2836.0	12	8959.2	12	104.2	-4	359.4	-1	3.7	4.3	-3.3	NM	-0.46
	672.4	8	1932.2	7	57.0	68	113.0	59	6.5	5.4	24.1	15	1.42
AAN	475.0	5	1235.9	5	26.2	86	50.7	63	5.5	7.1	11.5	15	0.44
STRY COMPOSITE	78971.5	3	230441.8	5	7191.5	11	18651.0	-1	9.1	8.5	25.5	31	1.72
PPAREL													
P COMPOSITE	9206.8	0	25631.8	2	550.2	-7	985.8	-32	6.0	6.4	8.5	31	0.98
N GROUP (11)	383.6**	1	1148.0	2	4.3	22	-4.5	NM	1.1	0.9	-8.8	NM	-1.02
OF THE LOOM	593.7	4	1678.9	-2	50.4	NM	146.9	694	8.5	NM	44.8	NM	-3.40
APPAREL GROUP	500.3	11	1192.6	15	59.1	21	122.7	26	11.8	10.9	31.3	12	1.41
OOD (8)	427.7	7	1305.8	12	7.8	7	26.8	9	1.8	1.8	11.1	14	1.97
AIBORNE	703.9	3	1925.1	6	62.7	-6	139.5	1	8.9	9.7	19.4	10	2.82
7)	2504.8	-9	7036.6	-7	163.8	-35	169.3	-74	6.5	9.2	9.3	41	1.06
WEST GROUP (11)	528.0	7	1443.2	12	21.6	-25	26.0	-52	4.1	5.8	13.0	8	1.69
PS-VAN HEUSEN (11)	306.4	-2	939.1	-4	2.7	NM	-45.1	NM	0.9	NM	-14.2	NM	-1.12
K INTERNATIONAL	878.3	-13	2519.0	-9	28.2	-62	31.0	-77	3.2	7.3	6.4	30	0.56
ILL	377.2	2	905.3	1	-14.2	NM	-5.7	NM	NM	6.3	0.9	NM	0.16
	1458.8	3	4135.3	5	119.6	10	284.5	10	8.2	7.7	18.4	14	3.01
ACO GROUP	544.1	63	1402.2	60	44.1	38	94.4	40	8.1	9.6	6.0	38	0.68
PLIANCES & HOME FURNISHINGS													
P COMPOSITE	12530.8	17	37781.5	17	427.6	629	1199.3	70	3.4	0.5	15.4	23	1.56
TRONG WORLD INDUSTRIES	821.6	43	1920.3	15	61.5	82	164.1	19	7.4	5.9	24.5	12	5.21
ATH & BEYOND (10)	344.9	29	919.6	27	25.5	31	63.3	33	7.4	7.3	24.0	48	0.58
BUY (10)	2182.1	22	6977.9	21	44.1	564	123.9	888	2.0	0.4	17.4	31	1.57
IT CITY GROUP (10)	2117.1	17	6627.8	15	32.1	15	102.9	-6	1.5	1.5	6.8	31	1.17
TURE BRANDS INTERNATIONAL	487.2	11	1462.6	10	30.5	119	73.3	5	6.3	3.3	23.1	13	1.71
AN INTERNATIONAL INDUSTRIES (6)	315.9	-4	1096.9	3	8.5	0	37.9	5	2.7	2.6	10.5	14	2.86
-MEYERS (10)	675.0**	14	1978.7	21	8.8	-6	-10.1	NM	1.3	1.6	-9.5	NM	-1.07
TT & PLATT	884.1	18	2532.7	18	65.2	23	186.5	22	7.4	7.1	18.1	19	1.21
IG	1035.2	21	3097.3	26	77.4	57	217.7	65	7.5	5.8	52.6	17	2.83
	1128.6	-8	3579.7	-2	-4.1	NM	12.9	-86	NM	3.0	11.5	52	0.95
POOL	2539.0	24	7588.0	24	78.0	NM	227.0	NM	3.1	NM	14.2	14	3.63
EVERAGES													
P COMPOSITE	18179.8	2	51923.3	6	2235.4	5	6033.4	4	12.3	12.0	33.4	36	1.49
JSER-BUSCH	3122.0	1	8635.8	1	408.3	4	1064.7	3	13.1	12.7	28.8	24	2.48
N-FORMAN (8)	390.1	5	1204.2	6	37.2	8	126.9	10	9.5	9.3	23.1	25	2.71
DAIGUA BRANDS (10)	349.4	16	944.9	9	15.8	28	39.4	39	4.5	4.1	13.9	17	2.98

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1997 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1997 \$ MIL	CHANGE FROM 1997	6 MONTHS ENDING 9-30 1997 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998	3RD QUARTER 1997		
COCA-COLA	4747.0	-4	14355.0	1	888.0	1	2936.0	11	18.7	20.4	47.0	45
COCA-COLA ENTERPRISES	3528.0	1	10173.0	24	116.0	4	176.0	-7	3.3	3.5	7.4	95
COORS (ADOLPH)	499.4	2	1455.4	3	9.1	-48	58.4	-24	1.8	3.6	8.5	29
PEPSICO	5544.0	3	15155.0	3	761.0	38	1632.0	56	13.7	10.3	33.4	25
(D) PERSONAL CARE												
GROUP COMPOSITE	19121.7	1	55295.3	2	1695.5	-17	4880.1	-1	8.9	10.7	30.6	36
ALBERTO-CULVER (3)	466.6	3	1389.3	3	22.6	4	63.4	8	4.9	4.8	15.6	19
AVON PRODUCTS	1233.2	-1	3663.8	3	41.5	-47	121.9	-41	3.4	5.5	112.6	41
CLOROX (6)	11.8	6	2186.1	6	85.4	15	259.5	21	12.5	11.5	28.5	37
COLGATE-PALMOLIVE	2265.4	-1	6681.4	-1	214.9	14	614.4	15	9.5	8.2	36.4	35
DIAL	383.9	15	1085.7	1	26.7	19	75.2	23	7.0	6.7	25.7	28
ECOLAB	500.0	16	1404.9	15	47.0	16	115.3	16	9.4	9.4	26.4	27
ESTEE LAUDER (6)	997.0	11	2713.5	10	71.6	16	161.3	18	7.2	6.9	32.1	35
GILLETTE	2531.0	-6	6881.0	3	6.0	-99	646.0	-36	0.2	16.2	21.3	46
PROCTER & GAMBLE (6)	9510.0	2	27668.0	2	1167.0	7	2814.0	9	12.3	11.4	31.2	34
REVLON	548.6	-6	1621.7	1	12.7	-63	9.1	-55	2.3	6.0	NM	20
(E) TOBACCO												
GROUP COMPOSITE	19932.4	1	59809.9	2	2282.8	36	5552.3	-8	11.5	8.5	25.2	21
PHILIP MORRIS	14371.0	3	43313.0	2	1980.0	41	5098.0	2	13.8	10.0	37.1	20
RJR NABISCO HOLDINGS	4328.0	-2	12567.0	1	158.0	30	8.0	-99	3.7	2.8	-2.5	NM
UNIVERSAL (6)	879.3**	-14	2878.2	-3	27.1	-17	97.5	19	3.1	3.2	24.7	10
UST	354.1		1051.7	0	117.8	3	348.9	6	33.3	31.7	85.9	14
7												
INDUSTRY COMPOSITE	9615.6	5	26997.1	4	319.2	-16	1132.6	12	3.3	4.2	11.7	21
(A) GLASS, METAL & PLASTIC												
GROUP COMPOSITE	5164.9	8	13708.3	5	139.0	-37	542.9	-8	2.7	4.7	11.0	17
BALL	859.2	24	2054.5	13	24.9	10	49.2	-3	2.9	3.3	8.6	25
CROWN CORK & SEAL	2291.0	-2	6428.4	-2	-21.1	NM	146.3	-43	NM	3.6	6.0	24
OWENS-ILLINOIS	1453.6	17	3937.1	12	113.6	24	309.0	32	7.8	7.4	16.5	14
SILGAN HOLDINGS	561.1	14	1288.3	12	21.6	-1	38.4	-18	3.9	4.4	NM	12
(B) PAPER												
GROUP COMPOSITE	4450.7	1	13288.8	4	180.2	13	589.7	39	4.0	3.6	12.5	25
AVERY DENNISON	860.2	3	2171.7	3	55.8	1	167.4	11	6.5	6.3	25.8	19
BEMIS	465.5	0	1387.6	-2	27.8	9	79.9	9	6.0	5.5	17.4	17
JEFFERSON SMURFIT	11.1	1	2529.0	1	8.0	0	30.0	NM	1.0	1.0	NM	37
MAIL-WELL	404.1	45	1072.9	37	12.7	44	33.5	36	3.1	3.2	14.3	16
ROCK-TENN (3)	329.2	1	977.1	8	11.8	21	33.3	283	3.6	3.0	10.6	9
SONOCO PRODUCTS	607.0	-14	1917.9	-9	39.7	-5	160.2	24	6.5	5.9	4.2	87
TEMPLE-INLAND	943.7	1	2829.0	5	24.4	94	85.4	1	2.6	1.3	4.7	29
10												
INDUSTRY COMPOSITE	128500.0	11	389479.3	11	4765.4	70	13740.3	40	3.7	2.4	16.6	26
AMES DEPARTMENT STORES (11)	536.3**		1804.7	10	8.4	14	35.9	62	1.6	1.5	21.0	11
AUTOZONE (4)	1216.9	29	2567.6	21	92.1	13	180.4	15	7.6	8.6	18.6	18
BARNES & NOBLE (11)	675.0		2309.9	1	-5.7	NM	60.8		NM	NM	11.3	38
BJ'S WHOLESALE CLUB (11)	873.1	11	2646.1	13	18.4	23	61.0	27	2.1	1.9	15.6	18
BORDERS GROUP (11)	546.0	17	1950.0	18	2.4	380	85.1	27	0.4	0.1	13.3	25
BRADLEES (11)	313.3**	4	1052.6	3	-2.7	NM	-1.5	NM	NM	NM	NM	NM
BRYLANE (11)	300.5		994.1	18	12.0	12	38.3	4	4.0	3.9	26.2	5
BURLINGTON COAT FACTORY (7)	347.2	14	1111.1	1	-11.5	NM	NM	NM	NM	NM	11.1	NA
CALDOR (11)	572.5	-4	1912.2	-3	16.1	NM	-90.3	NM	NM	NM	NM	NM
CDW COMPUTER CENTERS	462.7	43	1256.3	36	17.1	32	47.5	28	3.7	4.0	24.6	26
CONSOLIDATED STORES (11)	823.9	3	3263.3		6.5	13	75.2	-48	0.8	0.7	8.2	20
COSTCO (4)	7707.0**	11	18840.1	11	150.7	29	361.9	29	2.0	1.7	16.3	28
DAYTON HUDSON (11)	7056.0**	12	22477.0	10	172.0	22	688.0	43	2.4	2.2	17.9	23
DILLARD'S (11)	1552.0**	4	5397.6	7	47.9	8	222.4	4	3.1	3.0	9.5	13
DOLLAR GENERAL (11)	11.1	24	2307.7	29	33.3	25	128.7	32	4.5	4.5	24.7	31
EAGLE HARDWARE & GARDEN (11)	308.0	11	780.6	13	15.4	18	25.1	21	5.0	4.7	9.5	21
FAMILY DOLLAR STORES (4)	597.5	17	1819.2	18	20.0	41	79.0	38	3.4	2.8	18.3	30
FEDERATED DEPARTMENT STORES (11)	3523.0**	2	12039.1	1	107.0	61	546.5	44	3.0	1.9	12.3	13
FINGERHUT	349.8	8	949.4	-1	18.7	NM	-20.0	NM	NM	1.3	4.6	18
FOOTSTAR	472.6	2	1336.1		18.4	-2	41.1	6	3.9	4.1	18.2	9
GAP (11)	1905.0	42	5790.2	36	136.9	97	488.6	50	7.2	5.2	42.7	38
GLOBAL DIRECTMAIL	359.8	39	1048.6	32	9.6	348	30.0	16	2.7	0.8	15.3	13
HILLS STORES (11)	357.2	2	1351.1	-1	-20.2	NM	-10.0	NM	NM	NM	-7.4	NM
HOME DEPOT (11)	8139.8	24	20994.2	22	466.7	30	1111.4	28	5.7	5.5	17.0	46
HOMEBASE (11)	424.6	1	1101.9	1	14.7	31	10.9	-7	3.5	2.7	0.2	NM
INTIMATE BRANDS (11)	874.7	6	3042.8	13	73.6	21	274.2	9	8.4	7.4	54.5	18
KMART (11)	8116.0	3	25390.0	2	80.0	127	313.0	11	1.0	0.4	5.9	22

PORATE SCOREBOARD

IPANY

SALES

PROFITS

MARGINS

RETURN ON EQUITY

PRICE- EARNINGS RATIO

12 MONTHS' EARNINGS PER SHARE

	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %	12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 10-30	12 MONTHS' EARNINGS PER SHARE
S (11)	758.7	22	2581.1	25	31.3	50	130.8	48	4.1	3.3	16.1	47	1.01
ED (11)	2083.1	3	7359.6	8	1684.3	NM	1849.1	596	80.9	1.4	96.4	3	7.35
'S (11)	3425.7	22	8722.8	20	165.4	31	332.4	32	4.8	4.5	14.5	29	1.15
DEPARTMENT STORES (11)	2889.0**	5	9998.0	5	131.0	13	686.0	8	4.5	4.2	20.2	19	3.24
ELS STORES (11)	314.2	13	1157.0	6	0.6	NM	31.5	272	0.2	NM	7.8	18	1.14
WAREHOUSE	551.8	6	1625.0	5	11.9	NM	16.6	95	2.2	NM	-7.6	NM	-0.83
AN MARCUS GROUP (5)	536.7**	8	1792.8	8	16.2	16	73.7	22	3.0	2.8	16.2	10	2.13
STROM (11)	1474.9**	7	4026.7	9	69.2	18	160.6	20	4.7	4.2	14.3	21	1.30
E DEPOT	2234.9	10	6702.1	11	15.7	-74	164.5	-2	0.7	3.0	11.3	27	0.93
EMAX (11)	874.5	13	3043.8	16	2.6	7	61.7	28	-0.3	0.3	7.8	12	0.74
SS CASHWAYS (1)	523.5	-17	1423.7	-20	1.0	NM	-23.2	NM	0.2	NM	NM	NA	NA
SS SHOESOURCE (11)	723.1	1	1973.6	5	49.3	8	104.5	12	6.8	6.4	17.9	13	3.67
EY (J.C.) (11)	6761.0**	2	23564.0	8	27.0	-70	425.0	32	0.4	1.4	7.3	24	1.97
OYS-MANNY, MOE & JACK (11)	635.3	18	1721.9	17	17.7	-41	0.0	NM	2.8	5.6	2.9	38	0.41
MART (11)	509.8	20	1517.0	17	-1.7	NM	3.0	NM	NM	NM	0.9	NM	0.03
ITT'S (11)††	777.1**	6	2760.4	5	14.4	78	69.7	9	1.8	1.1	7.5	24	0.94
STORES (11)	537.0	9	1593.5	10	32.4	16	100.9	21	6.0	5.7	32.6	13	2.57
HOLDINGS (11)††	509.6**	12	1764.1	12	-11.1	NM	314.7	597	NM	NM	39.3	NA	4.95
IN (HENRY)	492.6	12	1419.0	14	2.3	NM	16.2	319	0.5	NM	2.0	NM	0.26
S, ROEBUCK	9748.0	0	29158.0	3	68.0	81	537.0	-18	0.7	3.6	18.9	17	2.69
CE MERCHANDISE	605.0	-8	1884.3	-15	-38.1	NM	-68.5	NM	NM	NM	-3.9	NM	-0.11
EL	618.6	-4	1893.2	-3	4.2	NM	-29.7	NM	NM	NM	0.4	NM	-0.02
TY AUTHORITY (11)	427.2	11	1194.3	11	3.8	-60	8.1	-72	0.9	2.5	3.0	25	0.31
ES (11)	1475.7	24	4696.3	29	8.9	61	109.0	22	0.6	1.9	13.8	49	0.66
1)	1864.2	10	5882.9	13	84.9	61	271.3	54	4.6	3.1	34.8	17	1.11
'R' US (11)	2020.0	2	9046.2	5	14.0	-62	411.0	-8	0.7	1.9	11.1	51	0.38
FFICE PRODUCTS (8)	651.9	6	1999.5	9	-83.5	NM	-61.9	NM	NM	1.5	-9.5	NM	-1.25
E CITY DEPARTMENT STORES (5)	339.0**	35	897.0	11	2.9	NM	17.1	NM	0.9	NM	7.4	15	0.63
OR GROUP (11)	1465.0	2	4933.0	-3	-13.0	NM	97.0	-34	NM	1.7	12.0	8	1.12
MART STORES (11)	33521.0	18	98726.0	17	1034.0	30	3149.0	24	3.1	2.8	20.5	30	1.75
ELECTRICAL & ELECTRONICS													
STRY COMPOSITE	48146.4	5	135527.0	5	2361.7	-41	6211.2	-49	4.9	8.7	8.7	45	1.27
ELECTRICAL PRODUCTS													
IP COMPOSITE	6034.4	0	12535.8	-2	412.7	-3	893.2	-9	6.8	7.0	11.4	25	1.73
ICAN POWER CONVERSION	327.4	33	806.9	30	46.6	27	100.1	19	14.2	14.9	21.9	30	1.43
ER INDUSTRIES	924.0	11	2769.3	7	67.3	-18	207.0	-8	7.3	9.8	12.5	17	2.64
ELL	1620.0	-16	5019.0	-11	58.0	7	277.0	-1	3.5	2.8	22.9	11	6.14
ELL	361.6	3	1073.8	4	43.2	4	127.2	7	11.9	11.8	17.0	20	2.03
NAL SERVICE INDUSTRIES (4)	542.7	6	1543.8	1	30.4	-7	82.1	0	5.6	6.4	18.8	14	2.53
HEM (6)	446.7	-2	1323.1	-2	38.3	-38	99.9	-47	8.6	13.5	19.6	17	1.83
WELL INTERNATIONAL (3)	1812.0	5	NA	NA	1.9	10	NA	NA	7.1	6.8	-3.4	NM	-0.55
ELECTRONICS													
IP COMPOSITE	17367.0	11	50929.2	14	182.8	-74	-203.9	NM	1.1	4.5	0.5	NM	0.05
RAL INSTRUMENT	518.2	12	1423.6	8	39.4	61	9.5	-68	7.6	5.3	-2.9	NM	-0.25
IS (6)	903.1**	-9	2873.1	-3	28.4	-35	65.1	61	3.1	4.4	7.3	24	1.48
ES ELECTRONICS	1513.3	20	4173.3	22	42.9	-18	152.7	-62	2.8	4.2	2.2	5	0.45
N INDUSTRIES (5)	1244.0	16	3360.9	7	50.5	15	137.9	13	4.1	4.1	15.2	17	3.83
ROLA	7152.0	-3	21061.0	-2	-42.0	NM	-1190.0	NM	NM	3.6	-7.4	NM	-1.46
COMM (3)	926.0	54	2562.0	50	39.9	33	71.8	-13	4.3	5.0	11.2	38	1.47
TEON	4746.0	38	14398.0	49	11.0	-95	495.0	-18	0.2	6.1	3.9	52	1.12
N ASSOCIATES (3)	364.5	-10	1077.3	-2	12.7	-62	54.1	-47	3.5	8.1	13.6	16	2.43
INSTRUMENTS													
IP COMPOSITE	7078.3	7	21471.1	11	486.8	-6	1537.2	7	6.9	7.8	15.9	29	2.16
AN COULTER	400.8	48	1234.9	60	13.9	-28	15.0	-73	3.5	7.1	NM	NM	-11.14
SON ELECTRIC (3)	3428.1	9	10275.7	9	313.9	8	946.3	9	9.2	9.2	21.2	11	2.80
YWELL	2119.4	4	6077.9	7	145.4	22	367.5	25	6.9	5.8	21.3	19	4.25
N-ELMER (6)	375.8	16	1215.1	16	17.0	-21	46.0	-7	4.5	6.6	8.8	77	1.09
ONIX (7)	419.0	-13	1494.5	-1	-4.7	NM	72.1	-22	NM	5.6	7.4	18	0.99
YNE	335.2	0	1173.0	34	1.3	-97	90.3	11	0.4	11.6	13.2	20	1.59
EMICONDUCTORS & OTHER COMPONENTS													
IP COMPOSITE	17666.6	2	50590.8	0	1279.4	-45	3984.7	-47	7.2	13.5	13.1	40	1.57
NCED MICRO DEVICES	685.9	15	1753.3	1	1.0	NM	-126.3	NM	0.1	NM	-7.2	NM	-0.92
	1337.2	-7	4084.9	-5	-76.3	NM	81.0	-75	NM	8.5	7.4	43	0.95
3)	324.1	-2	921.1	-2	10.5	71	57.6	-44	3.2	11.2	10.7	17	1.04
	6731.0	9	18659.0	1	1559.0	-1	4004.0	-23	23.2	25.6	26.4	27	3.25
CIRCUIT (4)	317.6	4	957.9	24	-1.8	NM	35.6	-18	NM	5.9	22.2	33	1.42
IGIC	390.4	19	1045.3	8	-282.8	NM	-220.3	NM	NM	13.6	-13.8	NM	-1.33
ON TECHNOLOGY (4)	692.0	-27	2057.3	-26	-89.1	NM	-243.3	NM	NM	7.6	-8.7	NM	-1.11

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
MOLEX (6)	409.9	0	1217.2	0	39.2	-12	131.4	-3	9.6	10.8	13.4	32
NATIONAL SEMICONDUCTOR (7)	469.6	-28	1629.7	-20	-104.8	NM	-294.9	NM	NM	9.5	-15.1	NM
SCI SYSTEMS (6)	1570.0	-10	4847.7	5	30.0	-18	101.1	7	1.9	2.1	18.5	19
SOLETRON (4)	1686.5	61	4151.5	44	55.9	18	153.9	22	3.3	4.5	16.8	35
TEXAS INSTRUMENTS	2113.0	-15	6467.0	-12	164.0	-31	218.0	-61	7.8	9.6	-0.7	NM
THOMAS & BETTS	539.9	4	1637.9	-1	-37.5	NM	41.4	-64	NM	8.1	8.4	28
VISHAY INTERTECHNOLOGY	399.5	40	1161.1	40	12.1	41	45.4	-25	3.0	7.3	3.9	27
10 INDUSTRY COMPOSITE	93452.3	5	277100.3	5	2778.9	5	7604.2	28	3.0	3.0	20.2	35
(A) FOOD DISTRIBUTION												
GROUP COMPOSITE	14910.8	6	46683.0	4	163.5	-23	501.8	-8	1.1	1.5	11.7	28
FLEMING	3438.8	0	11511.8	-2	-2.3	NM	26.6	-4	NM	0.3	3.3	10
INTERNATIONAL MULTIFOODS (10)	547.1	1	1750.9	0	4.6	-24	-6.0	NM	0.8	1.1	1.4	NM
PERFORMANCE FOOD GROUP	415.3	23	1157.4	29	4.7	25	11.4	17	1.1	1.1	10.5	21
RICHFOOD HOLDINGS (8)	901.3	22	2646.4	0	13.3	-8	38.5	-24	1.5	2.0	15.9	16
SUPERVALU (10)	3937.3	2	13437.4	5	39.9	-55	143.3	-25	1.0	2.3	14.7	16
SYSCO (6)	4192.6	10	11905.8	8	86.4	8	247.5	6	2.1	2.1	24.4	27
U.S. FOODSERVICE (6)	1478.4	10	4273.2	10	16.9	73	40.5	14	1.1	0.7	-5.0	NM
(B) FOOD PROCESSING												
GROUP COMPOSITE	36721.9	1	109305.2	1	1888.2	4	5103.6	45	5.1	5.0	22.4	37
BESTFOODS	1983.0	-2	6219.0	-1	168.0	14	474.0	82	8.5	7.3	64.0	25
CAMPBELL SOUP (5)	1299.0	-5	4883.0	0	182.0	17	437.0	-21	14.0	11.4	78.8	36
CHIKITA BRANDS INTERNATIONAL	633.2	14	2094.6	14	-10.8	NM	83.1	47	NM	NM	1.5	NM
CONAGRA (7)	6483.4	4	17749.9	1	109.3	-8	416.6	-7	1.7	1.9	21.8	23
CORN PRODUCTS INTERNATIONAL	359.5	0	1065.3	1	12.6	NM	31.3	NM	3.5	NM	4.2	25
DEAN FOODS (7)	825.1	33	2169.1	1	22.9	-6	60.0	-19	2.8	3.9	13.6	22
DREYER'S GRAND ICE CREAM	303.0	6	798.3	5	-6.0	NM	-7.1	NM	NM	1.7	-11.1	NM
EARTHGRAINS (9)	442.4	16	1319.8	15	10.0	8	28.4	57	2.3	2.4	6.9	30
GENERAL MILLS (7)	1473.1	4	4451.3	7	145.0	8	367.9	13	9.8	9.5	296.6	27
HEINZ (H.J.) (8)	2228.2	0	6940.2	-1	213.8	-12	583.2	210	9.6	10.9	34.8	28
HERSHEY FOODS	1217.2	6	3195.7	4	107.5	7	230.9	5	8.8	8.7	35.9	28
HORMEL FOODS (2)	755.8	-3	2349.0	-2	21.0	16	94.1	45	2.8	2.3	17.7	18
IBP	3210.7	-6	9770.0	-2	65.6	125	113.0	19	2.0	0.9	10.2	19
INTERNATIONAL HOME FOODS	439.7	26	1230.7	46	-49.0	NM	-8.6	NM	NM	NM	8.5	NM
INTERSTATE BAKERIES (7)	788.4	3	2536.4	3	34.5	15	98.3	20	4.4	3.9	23.0	14
KEEBLER FOODS	499.9	3	1626.7	5	29.0	56	62.4	60	5.8	3.8	28.8	29
KELLOGG	1805.8	0	5162.2	-1	141.9	-32	455.8	-14	7.9	11.5	51.1	28
MCCORMICK (1)	444.8	5	1295.4	4	21.5	12	53.8	9	4.8	4.5	28.3	23
NABISCO HOLDINGS	2098.0	-5	6191.0	-2	55.0	-40	-90.0	NM	2.6	4.2	2.1	NM
PILGRIM'S PRIDE (3)	340.7	0	993.7	1	20.3	9	38.9	26	6.0	5.5	21.7	13
QUAKER OATS	1405.2	3	3879.2	-2	107.8	39	211.3	NM	7.7	5.7	247.2	35
RALSTON PURINA (3)	1152.5	1	3336.2	3	104.8	10	250.9	7	9.1	8.4	34.8	28
SARA LEE (6)	4860.0	-1	14699.0	2	338.0	50	868.0	22	7.0	4.6	-23.2	NM
SMITHFIELD FOODS (8)	865.8	-5	2835.6	-3	-5.3	NM	39.1	36	NM	NM	15.3	14
VLASIC FOODS INTERNATIONAL (5)	313.4	-22	1009.4	-12	-24.1	NM	-22.5	NM	NM	6.3	-5.4	NM
WRIGLEY (WM.) JR.	494.0	3	1504.5	4	73.0	5	233.6	12	14.8	14.4	27.2	32
(C) FOOD RETAILING												
GROUP COMPOSITE	41819.7	8	121112.1	9	727.3	18	1998.8	5	1.7	1.6	19.3	33
ALBERTSON'S (11)	3995.1	9	11632.7	7	128.4	17	413.7	11	3.2	3.0	21.0	26
AMERICAN STORES (11)	4950.0	4	14803.3	3	88.2	-2	250.2	33	1.8	1.9	12.8	29
BRUNO'S (11)	492.3	-24	1613.5	-23	-34.8	NM	-106.3	NM	NM	NM	NM	NM
DOMINICK'S SUPERMARKETS (2)	725.9	-11	1841.9	-8	6.1	8	18.8	28	0.8	0.7	-25.6	NM
FOOD LION	2378.9	1	7037.7	1	72.8	NM	188.0	121	3.1	NM	17.4	19
GENERAL NUTRITION (11)	327.9	23	1032.4	21	28.0	21	90.7	40	8.5	8.7	39.2	11
GIANT FOOD (10)	963.6	3	3370.3	10	18.8	146	75.2	87	2.0	0.8	9.5	30
GREAT ATLANTIC & PACIFIC TEA (10)	2330.2	0	7911.8	2	11.0	-32	43.5	-30	0.5	0.7	5.8	16
HANNAFORD BROTHERS	854.7	4	2473.3	5	25.8	13	66.7	14	3.0	2.8	10.9	28
KROGER	8023.9	4	20854.3	4	124.4	29	270.4	-9	1.6	1.3	NM	35
MEYER (FRED) (11)	3504.9	140	9415.1	133	8.9	-70	-34.0	NM	0.3	2.0	-0.7	NM
PENN TRAFFIC (11)	730.2**	-6	2197.6	-6	-23.5	NM	-53.4	NM	NM	NM	NM	NM
RUDDICK (3)	633.0	7	1869.8	8	13.1	10	34.8	-4	2.1	2.0	11.6	19
SAFEWAY	5589.0	4	16561.6	13	193.7	29	551.7	36	3.5	2.8	27.6	32
SOUTHLAND	1742.9**	6	4739.6	3	35.6	6	49.3	-24	2.0	2.0	NM	19
SUPERMARKETS GENERAL HOLDINGS (11)	922.9	-1	2779.7	-1	-2.2	NM	31.8	NM	NM	NM	NM	NA
WEIS MARKETS	463.3	4	1375.6	2	18.4	-4	61.8	10	4.0	4.3	9.5	18
WINN-DIXIE STORES (6)	3190.8	4	9601.8	4	14.6	-69	109.5	-30	0.5	1.6	12.3	31

PORATE SCOREBOARD

IPANY

SALES

PROFITS

MARGINS

RETURN ON EQUITY

PRICE-EARNINGS RATIO

12 MONTHS' EARNINGS PER SHARE

	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	4 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	4 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %	12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30	12 MONTHS' EARNINGS PER SHARE
INDUSTRY COMPOSITE	104566.1	-15	317472.5	-13	2445.8	-65	13957.9	-38	2.3	5.8	12.0	25	2.12
COAL, OIL & GAS													
INDUSTRY COMPOSITE	91602.2	-17	278018.4	-15	3219.5	-48	12718.6	-37	3.5	5.7	12.3	25	2.28
ADA HESS	1550.7**	-18	5118.0	-17	-6.3	NM	-40.6	NM	NM	1.2	-3.3	NM	-1.12
ARCO	6483.0	-19	19990.0	-16	295.0	-54	968.0	-50	4.6	8.0	11.2	31	1.81
ARCO COAL	402.9	22	1056.6	46	0.5	NM	31.4	243	0.1	NM	8.4	13	1.32
ARCO (3)	1769.0	-44	4637.0	-46	0.0	NM	151.0	-10	0.0	1.5	9.5	18	2.63
ARCO RICHFIELD	2655.0	-24	7755.0	-29	-138.0	NM	60.0	-94	NM	5.9	5.2	50	1.37
ARCO RESOURCES	390.0	-16	1234.0	-15	15.0	-77	86.0	-70	3.8	14.2	4.0	61	0.68
ARCO	6588.0	-24	19966.0	-25	461.0	37	1538.0	-35	7.0	8.4	13.7	22	3.67
ARCO	1661.6	-22	5542.5	-26	89.5	11	307.0	18	5.4	3.8	13.0	18	1.98
ARCO CENTRAL PETROLEUM	312.5	-25	979.3	-19	3.1	-73	-12.8	NM	1.0	2.7	-7.0	NM	-1.39
ARCO	25384.0**	-13	78184.0	-14	1400.0	-23	4910.0	-18	5.5	6.2	17.1	24	2.99
ARCO-McGEE	359.5	11	1045.0	0	-22.8	NM	19.1	-85	NM	9.7	4.3	30	1.35
ARCO	13634.0***	-17	40497.0	-9	509.0	-43	1856.0	-28	3.7	5.4	13.1	24	3.13
ARCO OIL	433.3**	-22	1322.6	-16	9.0	7.9	46.8	-53	2.1	7.6	7.3	24	1.75
ARCO CENTRAL PETROLEUM	1661.0	-17	4904.0	19	38.0	71	363.0	-8	2.3	6.5	4.4	47	0.42
ARCO PETROLEUM	2890.0	25	8947.0	-22	46.0	7.9	447.0	-40	1.6	5.6	14.1	17	2.49
ARCO	2131.0***	-20	6439.0	-18	80.0	-28	228.0	-3	3.8	4.2	14.1	13	2.69
ARCO PETROLEUM	472.5	88	926.0	33	7.8	-3	24.7	4	1.7	3.2	8.2	14	1.04
ARCO	7707.0**	31	23898.0	-31	215.0	-56	816.0	-60	2.8	4.4	11.4	23	2.58
ARCO	2964.5	21	9180.0	-2	80.3	-20	222.1	29	2.7	2.7	12.7	17	1.61
ARCO DIAMOND SHAMROCK	2740.9*	5	8571.5	13	25.8	-54	-10.4	NM	0.9	2.2	1.0	NM	0.17
ARCO PACIFIC RESOURCES GROUP†	642.0**	43	1762.1	24	-17.3	NM	-3.4	NM	NM	15.0	4.3	45	0.29
ARCO	1394.0**	0	3998.0	-11	36.0	-80	159.0	-69	2.6	12.7	13.4	27	1.27
ARCO MARATHON GROUP	5662.0*	44	16722.0	41	51.0	-73	396.0	-5	0.9	4.9	11.1	22	1.50
ARCO ENERGY	1338.6	-32	4149.1	0	4.3	-92	38.4	-1	0.3	2.6	4.3	29	0.87
ARCO RESOURCES	375.2	-53	1194.8	-55	37.6	-28	118.4	-32	10.0	6.5	32.3	25	1.89
PETROLEUM SERVICES													
INDUSTRY COMPOSITE	12963.9	2	39454.1	7	-773.7	NM	1239.2	-49	NM	6.7	9.2	25	1.32
ARCO HUGHES	1584.9	5	4892.7	20	-534.5	NM	-303.6	NM	NM	NM	-10.7	NM	-0.27
ARCO SERVICES (3)	351.2**	-15	1112.1	-6	1.9	-95	73.3	-17	0.5	9.6	12.6	14	1.44
ARCO CAMERON	477.2**	1	1406.8	9	31.1	-22	109.4	17	6.5	8.4	22.2	12	2.82
ARCO OFFSHORE DRILLING	315.8	26	925.4	35	108.7	40	301.1	51	34.4	31.1	22.5	12	2.61
ARCO INDUSTRIES (2)	2075.7	11	5769.4	8	108.8	33	263.9	27	5.2	4.4	20.2	NA	2.12
ARCO BURTON	4224.0	1	13064.0	11	-527.0	NM	-80.4	NM	NM	4.9	-4.4	NM	0.38
ARCO BERGER	2932.4	-1	9040.1	-4	-29.5	NM	736.4	-25	NM	12.9	13.9	25	2.07
ARCO INTERNATIONAL	520.2	-7	1656.9	5	24.1	-26	50.1	-41	4.6	5.8	12.8	20	1.79
ARCO INTERNATIONAL	482.5	-5	1586.7	12	4.8	-1	89.0	-25	5.0	10.5	7.8	21	1.27
DRUGS & RESEARCH													
INDUSTRY COMPOSITE	100821.5	15	295083.5	14	7694.9	14	23674.0	26	7.6	7.7	21.6	41	1.64
DRUG DISTRIBUTION													
INDUSTRY COMPOSITE	31813.8	18	91198.8	17	217.1	-49	1237.5	25	0.7	1.6	11.5	49	1.00
ARCO RESOURCE HEALTH (3)	2034.1	-8	6320.9	4	3.4	-79	36.0	1	0.2	0.7	67.1	25	2.08
ARCO BRUNSWIG (3)	4644.7**	21	13952.6	20	-64.2	NM	-18.2	NM	NM	0.5	0.5	NM	0.06
ARCO LEY WESTERN INDUSTRIES	1813.2	0	5623.0	7	8.4	52	24.6	48	0.5	0.3	8.7	26	1.42
ARCO HEALTH (6)	4632.7**	25	11559.0	24	57.8	-17	184.7	7	1.2	1.9	11.9	44	1.45
ARCO	3725.1	12	11082.5	9	102.4	25	250.6	NM	1.7	2.5	13.5	55	0.83
ARCO DRUG STORES (11)	786.8	10	2348.7	5	14.9	21	50.4	5	1.9	1.7	10.1	25	1.56
ARCO SSSON (9)	6941.5**	35	18173.6	29	9.4	-76	87.2	-24	0.1	0.8	7.9	58	1.32
ARCO CARE	383.6	45	1082.1	52	25.7	126	54.3	45	6.7	4.3	7.6	40	0.87
ARCO AID (10)	3011.0	14	9234.3	16	-92.7	NM	117.9	-36	NM	2.3	6.5	57	0.70
ARCO GREEN (4)	3841.0	16	11822.0	15	152.0	43	450.0	25	4.0	3.2	19.9	48	1.07
DRUGS & RESEARCH													
INDUSTRY COMPOSITE	31108.3	11	91175.2	11	5694.4	19	17025.3	38	18.3	17.2	34.4	39	2.17
ARCO TTT LABORATORIES	3035.8	6	9147.4	4	531.7	15	1706.9	12	17.5	16.5	42.8	32	1.47
ARCO ORGAN	329.4	13	939.6	12	-31.4	NM	-118.8	NM	NM	15.0	-11.1	NM	-1.14
ARCO RICAN HOME PRODUCTS	3224.1	7	10232.5	-3	619.0	42	2124.7	44	19.2	12.5	29.1	24	2.03
ARCO EN	700.9	17	1963.2	9	221.0	164	624.6	34	31.5	14.0	34.3	26	3.04
ARCO TOL-MYERS SQUIBB	4523.0	9	13399.0	9	966.0	13	2728.0	14	21.4	20.6	48.7	32	3.46
ARCO (ELI)	2573.2	19	7183.0	18	518.2	13	1537.8	NM	20.1	21.2	42.9	46	1.77
ARCO Kt	6838.3	15	19367.5	11	1367.0	14	3847.5	14	20.0	20.2	37.3	33	4.15
ARCO R	3330.0	21	9678.0	21	515.0	-12	1644.0	4	15.5	21.2	28.8	64	1.68
ARCO MACIA & UPJOHN	1707.0	8	5010.0	0	219.0	177	554.0	23	12.8	5.0	7.9	67	0.79
ARCO RING-POUGH	1986.0	16	6018.0	20	432.0	23	1337.0	21	21.8	20.6	49.4	46	2.26
ARCO IA-ALDRICH	300.4	5	901.2	7	41.4	-1	126.7	2	13.8	14.6	14.9	19	1.66
ARCO NER-LAMBERT	2560.2	21	7335.8	25	295.5	49	912.9	44	11.5	9.4	36.2	58	1.36

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
(C) HEALTH-CARE SERVICES												
GROUP COMPOSITE	27194.1	19	80593.2	20	874.0	33	1766.5	-24	3.2	2.9	0.8	NM
BEVERLY ENTERPRISES	697.9	-13	2107.8	-14	21.3	21	60.9	-8	3.1	3.4	6.2	14
COLUMBIA/HCA HEALTHCARE	4579.0	-1	14261.0	-1	163.0	79	555.0	-40	3.6	2.0	-2.6	NM
COVENTRY HEALTH CARE	593.3	93	1507.3	66	5.1	91	-18.0	NM	0.9	0.9	-3.4	NM
EXPRESS SCRIPTS	807.3	152	1986.1	125	11.3	31	30.8	26	1.4	2.7	16.8	41
HEALTH MANAGEMENT ASSOCIATES (3)	299.2	32	904.2	30	32.9	29	112.0	27	11.0	11.3	18.2	33
HEALTHSOUTH	1024.3	41	2824.5	35	102.4	21	329.2	46	10.0	11.6	12.3	11
HUMANA	2421.0	25	7170.0	29	-30.0	NM	72.0	-42	NM	2.3	7.3	26
INTEGRATED HEALTH SERVICES	752.4**	118	2250.4	123	42.8	105	126.1	154	5.7	6.1	4.2	48
LABORATORY CORP. OF AMERICA HOLDINGS	398.3	6	1157.4	0	11.4	111	33.5	184	2.9	1.4	NM	NM
OXFORD HEALTH PLANS	1171.5**	10	3593.1	15	-35.9	NM	-588.8	NM	NM	NM	NM	NM
PACIFICARE HEALTH SYSTEMS	2430.1	0	7257.5	9	53.2	73	143.4	55	2.2	1.3	1.0	NM
PHYCOR	408.5	44	1102.6	37	-50.8	NM	-43.0	NM	NM	5.3	-9.5	NM
QUEST DIAGNOSTICS	360.7	-3	1095.3	-6	6.1	103	21.5	42	1.7	0.8	-2.8	NM
QUORUM HEALTH GROUP (6)	389.4	-1	1160.0	1	25.5	19	66.4	-2	6.5	5.4	14.6	12
SUN HEALTHCARE GROUP	826.7	49	2463.7	60	11.5	208	-34.0	NM	1.4	0.7	-5.6	NM
TENET HEALTHCARE (7)	2553.0	10	7688.0	11	137.0	18	261.0	NM	5.4	5.0	10.9	22
TOTAL RENAL CARE HOLDINGS	318.6	61	865.7	62	29.1	99	-4.1	NM	9.1	7.4	1.5	NM
UNITED HEALTHCARE	4360.0**	47	12710.0	45	135.0	16	298.0	-13	3.1	3.9	-5.0	NM
UNIVERSAL HEALTH SERVICES	456.1**	26	1393.8	33	13.4	-3	59.5	14	2.9	3.8	12.0	23
VENCOR	718.1	-15	2320.1	1	37.6	2	33.0	-69	5.2	4.4	6.9	5
WELLPOINT HEALTH NETWORKS	1628.7**	11	4774.8	16	152.2	174	252.2	64	9.3	3.8	25.3	16
(D) MEDICAL PRODUCTS												
GROUP COMPOSITE	10705.4	7	32116.3	6	909.4	8	3644.9	17	8.5	8.4	21.5	39
BARD (C.R.)	298.5	0	895.4	-1	23.5	NM	88.6	83	7.9	NM	19.1	22
BAUSCH & LOMB	575.6	23	1763.7	22	36.5	97	42.6	1	6.3	4.0	5.9	46
BAXTER INTERNATIONAL	1649.0	10	4763.0	6	-124.0	NM	103.0	-13	NM	10.6	9.9	60
GUIDANT	445.4	57	1403.5	69	-177.0	NM	-43.0	NM	NM	14.2	3.4	NM
JOHNSON & JOHNSON	5724.0	2	17290.0	2	961.0	12	2976.0	11	16.8	15.3	27.1	31
MALLINCKRODT (6)	591.2	30	1665.7	10	32.4	NM	146.4	NM	5.5	NM	6.3	37
MEDTRONIC (8)	653.2**	1	1969.7	4	150.4	3	317.7	-24	23.0	22.7	22.3	66
OWENS & MINOR	768.4	-2	2365.3	2	6.6	2	13.5	-22	0.9	0.8	11.2	29
13 HOUSING & REAL ESTATE												
INDUSTRY COMPOSITE	23063.2	19	63936.3	18	1526.1	37	3686.8	17	6.6	5.7	17.0	15
(A) BUILDING MATERIALS												
GROUP COMPOSITE	13228.7	9	37541.8	10	1271.1	55	2831.9	28	9.6	6.8	23.3	15
AMERICAN STANDARD	1728.0	14	5016.0	12	36.0	NM	150.0	103	2.1	NM	NM	12
HUSSMANN INTERNATIONAL	333.2	14	872.0	14	20.3	NM	40.1	NM	6.1	NM	22.2	21
JOHNS MANVILLE	488.2	11	1322.8	6	50.7	30	141.7	37	10.4	8.9	23.3	13
LAFARGE	810.2	32	1819.8	37	123.7	28	169.0	38	15.3	15.8	17.8	11
MARTIN MARIETTA MATERIALS	312.4	15	776.7	17	45.9	27	84.9	12	14.7	13.4	16.8	21
MASCO	1122.0	12	3246.0	17	125.9	24	353.5	28	11.2	10.2	17.6	21
OWENS CORNING	1324.0	7	3747.0	20	135.0	129	202.0	23	10.2	4.8	NM	20
PPG INDUSTRIES	1804.0	0	5721.0	3	248.0	45	639.0	15	13.7	9.4	27.3	13
RPM (7)	448.1	8	1250.6	12	31.2	11	69.4	8	7.0	6.8	12.2	19
SHERWIN-WILLIAMS	1341.4	0	3823.4	1	100.7	2	225.4	5	7.5	7.4	16.3	16
SOUTHDOWN	341.4**	8	884.0	8	73.1	26	65.7	-43	21.4	18.3	12.4	20
TECUMSEH PRODUCTS	397.1	2	1357.4	1	19.2	-12	78.0	-8	4.8	5.6	9.2	12
USG	814.0	8	2324.0	8	91.0	168	240.0	216	11.2	4.5	91.2	8
VALSPAR (2)	327.7	16	845.5	17	22.2	8	51.1	12	6.8	7.3	21.3	17
VULCAN MATERIALS	509.5	7	1334.3	6	89.9	23	196.5	24	17.7	15.3	22.3	16
WATSCO	317.0	67	760.6	69	10.8	58	21.4	44	3.4	3.6	9.2	19
YORK INTERNATIONAL	810.4	8	2440.8	0	47.3	99	104.2	29	5.8	3.2	10.0	22
(B) CONSTRUCTION & REAL ESTATE												
GROUP COMPOSITE	9834.5	35	26394.5	31	255.0	-13	854.9	-8	2.6	4.0	9.3	16
CENTEX (9)	1243.1**	25	3492.9	25	56.6	55	148.7	61	4.6	3.7	18.0	11
CHAMPION ENTERPRISES	614.9	40	1660.5	33	28.1	40	71.6	38	4.6	4.6	23.8	11
CLAYTON HOMES (6)	314.7	20	928.7	14	33.2	12	110.1	14	10.5	11.3	16.0	13
FLEETWOOD ENTERPRISES (8)	840.2	15	2393.2	14	30.2	-2	79.7	21	3.6	4.2	25.7	11
KAUFMAN & BROAD HOME (1)	659.0	40	1622.7	32	28.1	85	53.4	76	4.3	3.2	19.0	14
LENNAR (1)	620.9	87	1593.8	90	35.1	76	76.9	81	5.6	6.0	13.1	13
M.D.C. HOLDINGS	331.5	24	878.4	26	14.3	95	34.8	117	4.3	2.7	17.1	9
NVR	456.0**	40	1157.3	34	24.8	175	51.1	115	5.4	2.8	33.2	8
OAKWOOD HOMES (3)	522.5	49	1266.6	49	24.9	-6	37.6	-44	4.8	7.6	10.6	13
PULTE	759.3**	13	1959.6	17	28.5	53	63.0	94	3.7	2.8	9.1	14
RYLAND GROUP	462.2	10	1224.4	6	12.5	86	26.0	111	2.7	1.6	10.8	11

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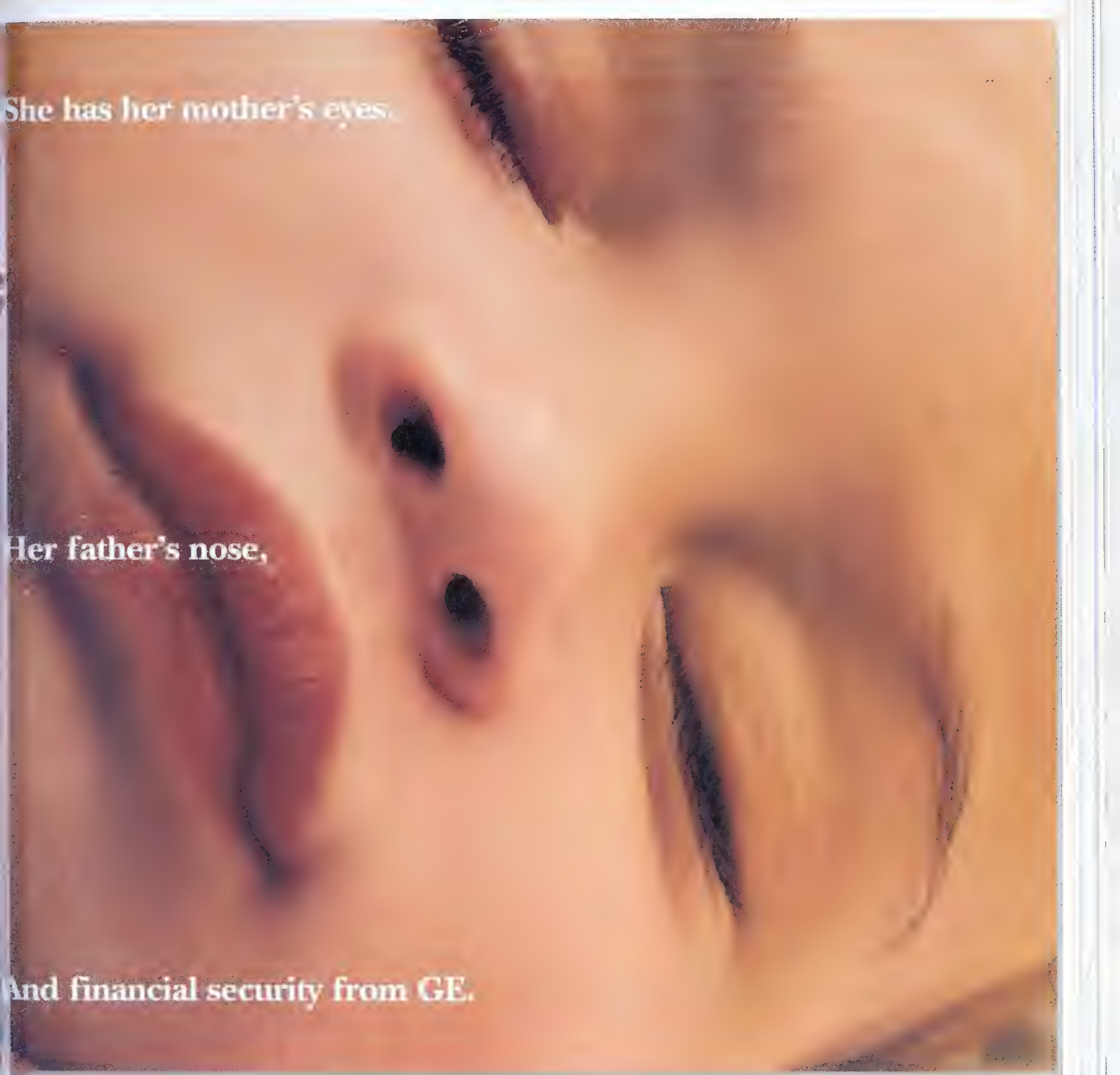
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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
STARWOOD HOTELS & RESORTS TRUST	2286.0	57	6296.0	47	-101.0	NM	-3.0	NM	NM	2.9	NM	NA
TOLL BROTHERS (2)	342.1**	41	836.5	28	25.7	55	58.0	34	7.5	6.8	16.5	11
U.S. HOME	382.0**	13	1084.0	9	14.1	8	47.1	38	3.7	3.9	12.0	7
INDUSTRY COMPOSITE	35640.1	7	97942.1	6	2715.5	17	7087.5	29	7.6	7.0	11.8	32
(A) EATING PLACES												
GROUP COMPOSITE	9041.1	4	26121.7	10	773.5	12	2606.3	48	8.6	7.9	25.2	32
ADVANTICA RESTAURANT GROUP	461.7	0	1331.4	NA	-36.5	NM	602.9	NA	NM	NM	NM	NA
BRINKER INTERNATIONAL (6)	432.1	15	1256.1	15	20.8	26	60.0	22	4.8	4.4	12.4	22
CKE RESTAURANTS (11)	474.8	96	1327.8	105	22.6	114	57.9	112	4.8	4.4	12.9	18
CRACKER BARREL OLD COUNTRY STORE (5)	365.2	13	1004.3	16	35.4	13	80.4	19	9.7	9.7	13.0	16
DARDEN RESTAURANTS (7)	886.1	9	2618.5	8	35.2	44	105.0	NM	4.0	3.0	11.1	23
HOTEL MARRIOTT SERVICES	362.2	6	962.1	7	18.5	-2	20.8	6	5.1	5.5	NM	18
MCDONALD'S	3215.0	7	9200.7	9	482.2	7	1201.6	-2	15.0	14.9	18.2	29
OUTBACK STEAKHOUSE	341.8	18	1008.1	19	24.4	20	71.3	26	7.1	7.0	15.4	23
TRICON GLOBAL RESTAURANTS	2017.0	-12	5942.0	-14	128.0	62	294.0	17	6.3	3.4	NM	NM
WENDY'S INTERNATIONAL	485.2	-8	1470.7	-4	42.9	-19	112.4	-17	8.8	10.1	9.7	26
(B) ENTERTAINMENT												
GROUP COMPOSITE	11514.1	13	30353.3	6	527.9	2	1113.0	-9	4.6	5.1	7.2	33
CIRCUS CIRCUS ENTERPRISES (11)†	364.5	15	1004.4	9	25.3	3	47.6	-38	6.9	7.7	6.4	14
DISNEY (WALT) (3)	6147.0	11	16637.0	3	296.0	-28	1095.0	-10	4.8	7.4	9.6	30
HARRAH'S ENTERTAINMENT	586.2	34	1479.3	21	44.2	-16	106.1	11	7.5	12.1	15.1	12
TRUMP HOTELS & CASINO RESORTS	397.3	6	1057.9	-3	5.3	75	-23.3	NM	1.3	0.8	-17.2	NM
VIACOM	4019.1	14	10174.6	11	157.1	482	-112.4	NM	3.9	0.8	3.5	52
(C) HOTEL & MOTEL												
GROUP COMPOSITE	3596.0	6	11136.0	10	165.0	-2	538.0	12	4.6	5.0	10.4	20
HILTON HOTELS	1333.0	1	4142.0	4	79.0	-16	262.0	3	5.9	7.2	7.3	21
MARRIOTT INTERNATIONAL	2263.0	9	6994.0	13	86.0	16	276.0	22	3.8	3.6	14.5	19
(D) OTHER LEISURE												
GROUP COMPOSITE	11488.9	3	30331.1	1	1249.1	31	2830.3	39	10.9	8.5	12.9	34
AMERICAN GREETINGS (10)	479.7	-1	1567.0	0	13.9	-47	102.4	-7	2.9	5.4	13.7	16
BRUNSWICK	956.5	9	2973.7	9	4.1	NM	146.4	24	0.4	NM	12.6	11
CARNIVAL (1)	1061.5	32	2280.7	19	344.8	16	615.3	20	32.5	37.0	20.3	25
EASTMAN KODAK	3391.0	-10	9843.0	-9	398.0	72	1118.0	49	11.7	6.1	10.5	69
HARLEY-DAVIDSON	520.8**	16	1513.4	14	52.4	27	152.5	17	10.1	9.2	20.2	31
HASBRO	945.5	3	2000.4	-3	61.3	-21	74.6	-36	6.5	8.5	5.3	51
IMATION	520.8	-2	1557.3	-5	13.4	NM	20.2	NM	2.6	NM	-19.8	NM
MATTEL	1672.1	8	3238.8	1	199.7	-11	272.7	188	11.9	14.4	25.5	23
MUSICLAND STORES	387.4	4	1147.0	5	-3.8	NM	-12.0	NM	NM	NM	460.1	8
POLARIS INDUSTRIES	359.9	23	844.6	10	-14.5	NM	8.3	-82	NM	7.4	15.4	34
POLAROID	448.8	13	1304.1	15	29.8	16	24.5	-68	6.6	5.0	-38.6	NM
ROYAL CARIBBEAN CRUISES	744.9	42	2061.1	46	150.0	98	307.3	92	20.1	12.4	14.9	16
INDUSTRY COMPOSITE	54821.1	11	162423.4	13	2720.4	-23	8308.4	-6	5.0	7.2	16.1	22
(A) GENERAL MANUFACTURING												
GROUP COMPOSITE	18569.8	10	54448.5	9	1004.5	-42	3525.3	-11	5.4	10.3	18.0	22
AEROQUIP-VICKERS	509.0	3	1630.3	3	23.9	-21	92.9	34	4.7	6.1	21.5	7
CARLISLE	378.0	20	1136.7	21	22.3	14	65.8	22	5.9	6.2	22.0	14
COLTEC INDUSTRIES	360.4	11	1129.6	18	27.4	17	92.3	34	7.6	7.2	NM	10
CORNING	918.3**	2	2590.1	-2	104.4	-2	223.2	-30	11.4	11.9	22.3	25
CRANE	595.4	11	1685.7	11	36.8	17	103.2	24	6.2	5.9	21.8	15
EXIDE (9)	601.1	9	1684.3	8	2.3	-72	-8.8	NM	0.4	1.5	5.0	13
FOAMEX INTERNATIONAL	332.7	43	945.0	35	9.6	48	26.3	9	2.9	2.8	NM	52
FORTUNE BRANDS	1192.8	10	3523.0	9	56.8	103	197.7	194	4.8	2.6	4.2	34
HARSCO	445.7	9	1303.0	6	25.9	-6	83.4	18	5.8	6.8	15.2	14
HILLENBRAND INDUSTRIES (1)	483.0	13	1470.0	13	42.0	20	130.0	17	8.7	8.2	19.3	23
ILLINOIS TOOL WORKS	1377.2	5	4138.7	7	163.9	10	488.5	14	11.9	11.3	20.5	25
JOHNSON CONTROLS (3)	3333.7	21	9530.5	14	136.0	46	272.4	64	4.1	3.4	19.7	15
MINNESOTA MINING & MFG.	3766.0	0	11236.0	-1	178.0	81	964.0	45	4.7	24.2	22.6	25
NEWELL	957.1	3	2650.3	11	99.2	14	336.8	67	10.4	9.4	23.5	17
PARKER HANNIFIN (6)	1218.7	13	3653.6	13	78.1	0	251.8	1	6.4	7.2	18.6	12
RUBBERMAID	628.6	8	1936.8	6	17.5	-42	79.1	-29	2.8	5.2	10.5	45
SEALED AIR	684.3	48	1785.3	32	-54.1	NM	8.5	-92	NM	7.8	NM	NA
TELEFLEX	343.0	22	1051.7	27	16.2	17	57.3	17	4.7	4.9	15.7	19
TOWER AUTOMOTIVE	444.9	27	1367.9	71	18.3	54	60.8	92	4.1	3.4	13.4	15



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CORPORATE SCOREBOARD

COMPANY

SALES

PROFITS

MARGINS

RETURN ON COMMON EQUITY

PRICE EARNINGS RATIO

3RD
QUARTER
1998
\$ MIL

CHANGE
FROM
1997
%

9
MONTHS
1998
\$ MIL

CHANGE
FROM
1997
%

3RD
QUARTER
1998
\$ MIL

CHANGE
FROM
1997
%

9
MONTHS
1998
\$ MIL

CHANGE
FROM
1997
%

3RD
QUARTER
1998
%

3RD
QUARTER
1997
%

12 MONTHS
ENDING
9-30

PRICE
EARNINGS
RATIO
10-30

(B) MACHINE & HAND TOOLS

GROUP COMPOSITE	4699.5	5	14057.5	11	120.5	-26	-398.2	NM	2.6	3.7	-2.5	NM
BLACK & DECKER	1107.7	-10	3285.7	-4	66.6	14	-846.4	NM	6.0	4.8	NM	NM
DANAHER	724.8	16	2107.5	16	28.5	-42	124.9	-1	3.9	7.9	12.1	32
KENNAMETAL (6)	480.9	55	1478.5	61	7.4	-58	51.5	-14	1.5	5.6	8.3	10
MILACRON	352.1	-18	1079.1	1	18.5	-9	51.8	9	5.3	4.7	17.4	9
NACCO INDUSTRIES	583.7	5	1797.2	14	20.4	41	70.8	120	3.5	2.6	21.3	7
SNAP-ON	441.9**	8	1343.4	9	-74.0	NM	-17.4	NM	NM	8.7	3.2	93
STANLEY WORKS	689.6	6	2053.3	4	33.4	NM	112.0	NM	4.8	NM	21.1	20
TEREX	318.7	49	912.8	47	19.7	126	54.7	169	6.2	4.1	132.5	8

(C) SPECIAL MACHINERY

GROUP COMPOSITE	27117.7	13	80800.2	17	1408.7	-8	4803.2	17	5.2	6.3	17.3	18
AGCO	665.7	-12	2183.3	-7	17.8	-60	82.9	-31	2.7	5.8	13.1	4
APPLIED MATERIALS (2)	884.5	-16	3368.5	21	47.5	-75	417.6	31	5.4	17.7	18.3	22
APPLIED POWER (4)	372.0	51	1022.0	37	-31.3	NM	14.5	-70	NM	6.5	7.8	42
CASE	1534.0**	6	4649.0	9	63.0	-19	258.0	-8	4.1	5.4	15.5	5
CATERPILLAR	5173.0	12	15571.0	13	336.0	-13	1212.0	0	6.5	8.4	32.4	10
CUMMINS ENGINE	1525.0	12	4660.0	15	-85.0	NM	-25.0	NM	NM	4.0	2.7	34
DEERE (2)	3693.4**	8	10609.1	13	290.8	15	859.3	15	7.9	7.4	25.7	8
DOVER	1231.2	6	3614.9	9	94.0	-8	284.0	-7	7.6	8.7	20.0	18
FMC	1110.7	5	3262.5	2	55.4	1	149.8	9	5.0	5.2	-1.5	NM
HARNISCHFAGER INDUSTRIES (2)	503.6	-29	1550.1	-24	-38.6	NM	-136.4	NM	NM	4.2	-13.6	NM
INGERSOLL-RAND	2020.0	19	6209.1	20	119.4	23	359.4	25	5.9	5.7	18.3	18
ITT INDUSTRIES	1039.1	-3	3232.5	8	26.9	NM	65.1	NM	2.6	NM	25.8	31
MCDERMOTT INTERNATIONAL (9)	780.0	-15	2524.6	-2	51.6	35	189.9	NM	6.6	4.1	29.4	8
PENTAIR	476.8	-1	1413.5	7	25.8	16	73.9	19	5.4	4.6	16.1	16
STEWART & STEVENSON SERVICES (11)	323.5	30	962.8	26	8.4	32	-12.1	NM	2.6	2.6	-2.1	NM
TIMKEN	616.8	-2	2026.0	4	13.6	-64	101.4	-18	2.2	6.0	14.0	8
TYCO INTERNATIONAL (3)	3536.8	91	9623.8	88	339.9	146	936.3	179	9.6	7.5	20.5	31
U.S. FILTER (9)	1225.9	31	3233.2	35	60.2	79	-57.7	NM	4.9	3.6	-29.6	NM
UNOVA	405.7	12	1084.3	-1	13.3	13	30.3	NM	3.3	3.2	3.8	32

(D) TEXTILES

GROUP COMPOSITE	4434.0	7	13117.2	8	186.8	58	378.0	3	4.2	2.9	15.2	20
BURLINGTON INDUSTRIES (3)	499.7	-5	1528.7	-5	16.7	14	67.2	36	3.3	2.8	11.5	7
COLLINS & AIKMAN	377.9	3	1319.4	10	-8.4	NM	-0.2	NM	NM	NM	NM	53
INTERFACE	328.3	10	964.1	17	14.4	37	36.3	46	4.4	3.5	11.5	13
MOHAWK INDUSTRIES	576.3	15	1582.5	14	32.5	56	77.8	60	5.6	4.2	19.9	16
PILLOWTEX	419.8	176	1118.2	202	15.0	113	27.7	162	3.6	4.6	10.6	23
SHAW INDUSTRIES	851.6	-8	2589.8	-2	39.6	56	-6.1	NM	4.7	2.7	-8.4	NM
SPRINGS INDUSTRIES	578.3	0	1672.1	1	21.8	-20	24.2	-55	3.8	4.7	5.5	18
UNIFI (6)	328.8	0	1033.5	-14	21.0	-24	89.4	-1	6.4	8.3	18.8	9
WESTPOINT STEVENS	473.2	3	1308.9	8	34.1	29	61.6	33	7.2	5.8	NM	20

16 METALS & MINING

INDUSTRY COMPOSITE	20278.3	-4	61420.6	-3	1033.8	-13	2737.1	-20	5.1	5.6	10.8	14
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(A) ALUMINUM

GROUP COMPOSITE	6647.3	3	19365.8	2	488.5	53	883.5	6	7.3	5.0	16.4	17
ALUMINUM CO. OF AMERICA	4108.9	22	11141.0	11	217.7	-5	634.7	7	5.3	6.8	19.6	16
KAISER ALUMINUM	541.6	-15	1753.4	-1	10.8	-38	39.5	17	2.0	2.8	34.0	9
MAXXAM	628.8	-13	1992.4	-3	-2.0	NM	12.3	-76	NM	2.5	242.3	16
REYNOLDS METALS	1368.0**	-20	4479.0	-13	262.0	376	197.0	29	19.2	3.2	8.0	24

(B) STEEL

GROUP COMPOSITE	8555.3	-5	26421.8	-1	319.2	-22	1105.3	-13	3.7	4.5	13.7	9
AK STEEL HOLDING	557.0	-7	1757.2	-3	9.3	-75	71.1	-36	1.7	6.2	12.5	9
ARMCO	415.4	-10	1313.2	-6	30.7	3	82.1	38	7.4	6.4	NM	7
BETHLEHEM STEEL	1143.1	3	3465.3	-1	37.1	-9	143.3	-40	3.2	3.6	9.7	8
COMMERCIAL METALS (4)	642.8**	5	1817.1	5	14.9	17	34.7	18	2.3	2.1	11.2	9
LTV	1064.0	-6	3284.0	0	11.0	NM	34.0	NM	1.0	NM	4.2	9
NATIONAL STEEL	706.4	-10	2162.7	-9	32.5	-59	64.9	-62	4.6	10.0	12.5	3
NUCOR	1011.0	-8	3278.2	4	65.1	-19	202.5	-7	6.4	7.3	14.0	14
TEXAS INDUSTRIES (7)	301.5**	1	929.8	16	27.3	10	81.3	30	9.0	8.3	18.1	6
USX-U.S. STEEL GROUP	1497.0	-14	4926.0	-3	65.0	-44	288.0	-4	4.3	6.7	21.7	5
WALTER INDUSTRIES (7)	493.1	23	1482.9	30	9.0	-36	41.2	23	1.8	3.5	15.2	14
WEIRTON STEEL	314.7	-12	992.4	-7	-0.5	NM	6.9	NM	NM	1.2	7.6	8
WORTHINGTON INDUSTRIES (7)	409.3	6	1013.0	-28	17.7	-16	55.3	-21	4.3	5.4	10.7	17

(C) OTHER METALS

GROUP COMPOSITE	5075.7	-12	15633.0	-11	226.1	-52	748.3	-44	4.5	8.1	5.7	22
ASARCO	545.6	-17	1781.3	-16	-15.6	NM	-61.9	NM	NM	6.9	-3.6	NM
CYPRUS AMAX MINERALS	585.0	-32	1936.0	-25	19.0	-57	-13.0	NM	3.2	5.1	-5.8	NM

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS				EQUITY M.V. ENDING 9-30	PRICE- EARNINGS RATIO 10-30
	1998 \$ M.	CHANGE FROM 1997	1998 \$ M.	CHANGE FROM 1997	3RD QUARTER 1998 \$ M.	CHANGE FROM 1997	1998 \$ M.	CHANGE FROM 1997	1998 %	1997 %	1998 %	1997 %		
ENGELHARD	1039.5**	14	3084.6	18	48.2	16	139.0	15	4.3	4.6	8.0	47		
ESSEX INTERNATIONAL	387.3	-13	1142.3	-13	16.8	-24	56.2	-13	4.3	5.0	25.2	12		
FREEPORT-McMORAN COPPER & GOLD	442.1	-	1272.1	-19	32.6	-28	103.0	-48	7.4	9.3	NM	19		
GENERAL CABLE	304.5	-1	889.8	5	22.1	28	53.7	42	7.3	5.7	45.3	11		
NEWMONT GOLD	349.9	-9	1101.9	-5	7.4	-84	67.6	113	2.1	12.0	6.2	NA		
NEWMONT MINING	349.9	-9	1101.9	-5	6.9	-84	63.4	113	2.0	11.2	6.2	33		
PHELPS DODGE	764.0	-21	2356.7	-23	28.6	-73	232.7	-38	3.7	10.8	10.1	13		
USEC (6)	107.7	-30	966.4	-13	63.1	-	107.7	-34	20.5	13.6	6.2	10		
17 COMPANY FIVE-YEAR														
INDUSTRY COMPOSITE	137683.7	8	410971.5	12	10388.8	-6	33390.9	6	7.5	8.7	14.5	18		
(A) FINANCIAL SERVICES														
GROUP COMPOSITE	67819.0	7	206250.3	15	4640.4	-22	17054.9	3	6.8	9.4	18.6	19		
AMERICAN EXPRESS	14069.0	8	14069.0	8	574.0	10	14069.0	8	12.0	12.0	22.6	21		
ASSOCIATES FIRST CAPITAL	2304.7	9	6830.9	12	317.6	17	891.5	18	13.8	12.8	16.8	21		
BEAR STEARNS (6)	1723.6	-	5897.5	16	64.1	-60	402.7	-18	3.7	8.9	15.1	9		
CAPITAL ONE FINANCIAL	670.1	46	1844.4	46	70.0	42	202.6	54	10.4	10.7	22.3	27		
CHICAGO TITLE	497.1	33	1375.7	33	29.9	71	61.9	54	6.0	4.7	17.4	12		
CIT GROUP	579.6	-	1677.5	9	86.1	14	251.5	5	14.9	13.9	12.2	14		
COUNTRYWIDE CREDIT INDUSTRIES (10)	2599.0	99	2599.0	100	95.1	-13	270.9	9	8.6	19.8	15.0	14		
DONALDSON, LUFKIN & JENRETTE	1864.0	-7	6463.0	19	25.7	-79	302.2	-2	1.4	6.0	17.8	12		
DUN & BRADSTREET	459.6	3	1414.7	7	68.7	26	159.8	15	14.9	12.2	NM	15		
EDWARDS (A.G.) (10)	551.2	8	1649.0	17	72.3	4	221.4	21	13.1	13.6	19.4	12		
EQUIFAX	425.4	24	1111.1	17	53.5	13	148.9	1	12.6	13.7	51.9	30		
FANNIE MAE	8117.2**	16	23272.1	13	862.2	11	2545.1	12	10.6	11.1	24.9	22		
FEDERAL HOME LOAN MORTGAGE	4502.0	25	12805.0	21	425.0	20	1232.0	20	9.4	9.9	25.2	26		
FIDELITY NATIONAL FINANCIAL	329.4	44	913.1	50	26.8	45	76.9	141	8.1	8.1	31.7	10		
FIRST AMERICAN FINANCIAL	753.3**	50	2062.6	54	55.8	171	145.9	248	7.4	4.1	29.2	10		
FRANKLIN RESOURCES (3)	598.6**	-6	1944.9	13	112.3	-10	369.9	10	18.8	19.8	22.4	19		
HELLER FINANCIAL	349.0	11	1017.0	15	47.0	18	146.0	19	13.5	12.7	10.7	NA		
HOUSEHOLD INTERNATIONAL	2190.4	2	6452.3	4	318.0	20	174.2	-76	14.5	12.3	6.2	37		
LANDAMERICA FINANCIAL GROUP	515.2	213	1277.9	183	30.6	263	64.1	271	5.9	5.1	12.9	12		
LEHMAN BROTHERS HOLDINGS (1)	5963.0	33	16097.0	31	151.0	-23	662.0	43	2.5	4.4	17.0	6		
MARSH & McLENNAN	1719.0	11	5245.0	20	186.0	32	610.0	36	10.8	9.1	15.9	27		
MERRILL LYNCH	8712.0	4	27681.0	14	164.0	NM	915.0	-38	NM	6.0	14.3	18		
MORGAN STANLEY DEAN WITTER (1)	7498.0	3	23511.0	16	645.0	-5	2190.0	23	8.6	9.3	22.6	14		
PAINEWEBBER GROUP	1809.1**	3	5514.5	12	82.9	-27	333.1	9	4.6	6.4	18.4	12		
SCHWAB (CHARLES)	872.0	16	2430.6	17	97.8	28	242.1	17	11.2	10.1	25.1	43		
SLM HOLDING	704.7	-32	2348.2	-19	107.8	-24	391.1	4	15.3	13.8	78.7	13		
TRAVELERS GROUP ¹	8221.9**	-	28685.5	3	199.2	-81	2433.2	-11	2.4	10.3	NA	NA		
(B) INSURANCE														
GROUP COMPOSITE	66031.1	9	193375.3	10	5233.3	5	14828.8	4	7.9	8.2	11.6	17		
AETNA	5439.2	7	14900.8	8	212.4	80	645.6	3	3.9	2.5	8.2	13		
AFLAC	1699.5	10	5160.1	-6	107.6	10	370.7	-24	6.3	5.4	13.2	23		
AMERICAN BANKERS INSURANCE GROUP	1240.4	1	1240.4	1	27.3	-8	14.8	-83	6.4	7.3	5.4	55		
AMERICAN FINANCIAL GROUP	1011.9	4	3034.6	3	56.5	68	164.0	4	5.6	3.2	11.8	45		
AMERICAN GENERAL	2589.0	17	7624.0	16	255.0	13	763.0	145	9.8	10.2	11.3	18		
AMERICAN INTERNATIONAL GROUP	8399.0	20	23048.9	11	931.1	11	2759.6	13	11.1	12.0	14.2	25		
AMERICAN NATIONAL INSURANCE	429.5	1	1312.0	1	40.9	1	154.3	-12	9.5	13.1	8.1	10		
AON	1606.7	11	4791.2	13	124.1	23	401.9	110	7.7	7.0	16.9	21		
BERKLEY (W.R.)	394.4	11	1111.1	11	12.3	-52	60.7	-19	3.1	7.2	8.5	12		
CIGNA	5226.0	1	15642.0	8	251.0	-10	1054.0	25	4.8	5.4	15.5	12		
CINCINNATI FINANCIAL	514.8	1	1545.9	6	52.9	1	195.9	-14	10.3	15.6	5.1	24		
CNA FINANCIAL	4129.0	-4	12886.0	2	-14.0	NM	429.0	-38	NM	6.4	8.1	11		
CONSECO	1921.7	1	5745.8	18	282.8	4	245.6	-66	14.7	14.9	8.1	23		
EQUITABLE	2373.6	-6	8269.9	17	139.1	-25	652.7	13	5.9	7.4	13.0	16		
EVEREST REINSURANCE HOLDINGS	327.4	-1	960.7	2	42.1	10	125.5	7	12.9	11.0	11.2	11		
HARTFORD FINANCIAL SERVICES GROUP	3640.0	1	10861.0	12	214.0	-28	714.0	-34	5.9	8.9	15.1	13		
HARTFORD LIFE	1287.0	22	3846.0	22	100.0	20	278.0	27	7.8	7.8	15.4	18		
JEFFERSON-PILOT	649.3	-1	1996.7	5	109.0	38	322.3	11	16.8	12.1	13.7	16		
LIBERTY FINANCIAL	303.9**	-3	908.1	-2	33.5	2	111.1	-3	11.0	10.5	9.8	9		
LINCOLN NATIONAL	1417.6**	12	4373.1	22	113.4	-9	384.2	140	8.0	9.9	4.8	31		
LOEWS	5951.9	16	16151.8	9	617.1	212	780.6	56	10.4	3.9	10.1	10		
OHIO CASUALTY	360.7	-2	1080.2	-1	22.9	-10	63.8	-29	6.3	6.9	8.2	12		
OLD REPUBLIC INTERNATIONAL	555.6	1	1598.7	10	74.7	8	236.6	13	13.4	14.0	13.8	9		
ORION CAPITAL	421.3	6	1288.7	10	2.3	-91	82.7	4	0.5	6.2	16.6	8		
PROGRESSIVE	1363.3**	13	3953.3	20	135.1	16	378.2	28	9.9	9.7	20.1	23		
PROTECTIVE LIFE	348.6	23	998.0	23	33.5	10	96.0	16	9.6	10.8	15.4	19		
PROVIDENT	966.1**	-2	2933.7	15	81.9	15	227.8	33	8.5	7.2	8.9	13		
RELIANCE GROUP HOLDINGS	748.1	-15	2398.2	-4	30.0	-48	303.2	128	4.0	6.5	29.1	1		

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COMPANY	SALES				PROFITS				MARGINS		COMMON EQUITY 12 MONTHS END-9-30	PRICE- EARNINGS RATIO 10-30
	3RD QUARTER 1997	CHANGE 1997	3RD QUARTER 1998	CHANGE 1997	3RD QUARTER 1998	CHANGE 1997	MONTHS END-9-30	CHANGE 1997	1998	1997		
	\$ MIL.	%	\$ MIL.	%	\$ MIL.	%	\$ MIL.	%	%	%		
SAFECO	5,000.4	52	5,000.4	55	74.9	-38	255.7	-27	1.5	10.9	5.9	18
ST. PAUL	6,944.1	-5	6,944.1	-4	63.8	-70	-38.8	NM	1.2	9.3	2.2	32
TIG HOLDINGS	441.0**	-2	1301.0	-1	-47.0	NM	*16.0	NM	8.9	-4.0	NM	
TORCHMARK	551.0**	4	1665.4	6	79.0	7	239.4	14	14.3	14.0	13.4	22
TRANSAMERICA	1489.7	-	4592.0	-	124.2	-17	430.3	26	8.3	10.5	11.8	11
TRANSATLANTIC HOLDINGS	1,289.2	24	1289.2	18	78.7	64	191.2	44	16.1	12.1	16.5	11
TRAVELERS PROPERTY CASUALTY	2601.0	-	7727.0	5	315.0	-4	975.0	11	12.1	13.0	15.8	9
UNITRIN	878.3	130	1671.2	48	111.2	851	464.1	141	40.1	9.7	29.3	3
UNUM	3,460.6	13	3460.6	10	104.4	14	296.6	-	8.9	8.8	14.4	17
(C) SAVINGS & LOAN												
GROUP COMPOSITE	3833.7	15	11345.9	15	515.0	817	1507.2	97	13.4	1.7	16.1	14
CHARTER ONE FINANCIAL	410.0**	-	1221.9	-	68.7	28	100.6	25	16.8	14.0	14.2	20
DIME BANCORP	489.9**	29	1454.3	32	63.9	62	179.5	79	13.1	10.4	15.1	14
GOLDEN WEST FINANCIAL	1,064.3	-	2,847.1	-	108.0	21	318.1	29	10.8	10.2	14.4	17
WASHINGTON MUTUAL	1,154.8	17	4,839.1	18	174.1	NM	780.1	108	12.7	NM	18.4	14
INDUSTRY COMPOSITE	110050.7	15	315585.9	13	7684.6	41	15413.8	-17	7.0	5.7	18.3	52
(A) BUSINESS MACHINES & SERVICES												
GROUP COMPOSITE	8472.1	21	24541.7	25	365.2	47	1102.4	22	4.3	3.6	20.8	20
COMPUCOM SYSTEMS	603.3	20	1638.6	15	1.1	-89	9.2	-59	0.2	1.9	10.4	11
DELUXE	469.7	1	1433.5	1	2.9	NM	88.7	680	0.6	NM	19.8	21
HON INDUSTRIES	448.7	15	1268.4	31	30.9	22	76.7	26	6.9	6.4	23.0	13
MICROAGE (2)	1441.2	24	3947.2	25	0.7	-89	-9.9	NM	0.1	0.6	-1.2	NM
MILLER (HERMAN) (7)	447.5	11	1349.5	15	34.0	22	105.4	53	7.6	6.9	57.3	15
PITNEY BOWES	1052.4	8	3073.4	7	139.2	12	405.5	10	13.2	12.7	32.7	28
REYNOLDS & REYNOLDS (3)	383.4	5	1116.2	8	27.0	NM	79.4	135	7.0	0.0	26.6	14
STANDARD REGISTER	340.6	44	1018.4	45	17.2	-	39.3	-19	5.1	6.9	11.3	14
STEELCASE (10)	704.0	1	2075.8	4	62.7	-5	170.4	14	8.9	9.5	15.4	13
TECH DATA (11)	2213.3	4	6510.8	54	35.3	64	84.1	47	1.6	1.4	12.7	18
WALLACE COMPUTER SERVICES (5)	1,109.9	17	1109.9	62	14.2	-26	10.1	-11	1.0	1.1	13.6	13
(B) COMPUTERS & PERIPHERALS												
GROUP COMPOSITE	64463.7	10	183966.9	7	3388.5	11	4664.9	-54	5.3	5.2	11.8	63
APPLE COMPUTER (3)	1556.0	4	4363.0	-12	106.0	NM	262.0	NM	6.8	NM	20.7	18
COMPAQ COMPUTER	8791.0	36	20310.0	18	115.0	-78	-3501.0	NM	1.3	8.0	-27.1	NM
DATA GENERAL (3)	383.7	-5	1096.8	-7	3.7	-78	-155.9	NM	1.0	4.2	-40.2	NM
DELL COMPUTER (11)	4331.0	54	11988.0	53	345.0	61	935.0	56	8.0	7.6	73.9	78
EMC	1002.5	37	2782.9	35	201.3	52	536.9	44	20.1	18.1	23.2	48
GATEWAY 2000	1815.5	21	5162.4	20	80.6	NM	217.3	NM	4.4	NM	25.9	28
HEWLETT-PACKARD (2)	10979.0	5	34835.0	12	621.0	1	2235.0	-3	5.7	5.9	17.6	21
INTERNATIONAL BUSINESS MACHINES	20095.0	8	56536.0	3	1494.0	10	3982.0	0	7.4	7.3	33.0	24
IOMEGA	391.8	-9	1193.1	0	-14.8	NM	-73.3	NM	NM	7.0	-9.4	NM
LEXMARK INTERNATIONAL GROUP	743.8	20	2113.2	20	57.8	41	161.1	52	7.8	6.6	42.3	23
MAXTOR	599.8	53	1680.7	82	6.1	NM	1.2	NM	1.0	NM	NM	NA
MICRON ELECTRONICS (4)	339.0	-34	1174.5	-23	16.2	-	46.9	-25	4.8	2.9	11.5	42
QUANTUM (9)	1164.7	-25	3553.5	-22	17.3	-83	23.0	-92	1.5	6.7	-0.8	NM
SEAGATE TECHNOLOGY (6)	1553.0	-18	4803.0	-25	-30.0	NM	-137.0	NM	NM	NM	-10.9	NM
SILICON GRAPHICS (6)	616.4	-20	2098.2	-26	-77.1	NM	-449.7	NM	NM	NM	-33.3	NM
STORAGE TECHNOLOGY	571.1	9	1598.3	8	50.6	-7	145.6	-2	8.9	10.4	27.6	16
SUN MICROSYSTEMS (6)	2491.2	19	7732.2	14	113.9	5	618.9	9	4.6	5.2	20.3	30
UNISYS	1781.4	10	5159.6	9	95.6	88	248.4	122	5.4	3.1	NM	NM
WESTERN DIGITAL (6)	650.9	-	1,000.0	-	100.0	NM	100.0	NM	NM	NM	NM	NM
XEROX	4607.0	-	1,000.0	-	100.0	NM	100.0	NM	NM	NM	NM	NM
(C) COMPUTER SOFTWARE & SERVICES												
GROUP COMPOSITE	37115.0	24	107077.3	23	3930.9	81	9646.5	27	10.6	7.2	25.0	49
AFFILIATED COMPUTER SERVICES (6)	1,002.3	37	1002.3	33	19.0	41	54.4	35	5.2	5.1	11.4	31
AMERICA ONLINE (6)	858.1	65	2344.0	62	108.4	242	134.2	788	12.6	6.1	13.9	NM
ASCEND COMMUNICATIONS	1,002.8	37	1002.8	15	66.1	65	177.5	NM	17.8	14.8	17.0	43
AUTOMATIC DATA PROCESSING (6)	1210.3**	17	3821.9	18	123.2	17	475.7	20	10.2	10.2	18.3	38
CABLETRON SYSTEMS (10)	370.6	0	1047.9	-6	11.3	-80	-410.1	NM	3.1	15.5	-37.8	NM
CADENCE DESIGN SYSTEMS	308.6	31	870.6	38	-192.8	NM	-151.9	NM	NM	23.5	-15.4	NM
CHS ELECTRONICS	2166.9	97	5687.8	95	23.2	103	64.0	161	1.1	1.0	11.0	6
CISCO SYSTEMS (5)	2390.0	35	6590.1	32	491.7	226	1013.5	17	20.6	8.6	19.0	75
COMDISCO (3)	905.0	17	2484.0	17	40.0	18	117.0	16	4.4	4.4	16.3	17
COMPUTER ASSOCIATES INTERNATIONAL (9)	1216.3	8	3730.3	16	293.9	8	214.8	-72	24.2	24.2	144.2	41
COMPUTER SCIENCES (9)	1847.8	17	5470.9	19	73.0	25	217.4	16	4.0	3.7	13.8	29
COMPUWARE (9)	366.6	48	1063.0	47	69.8	101	205.2	89	19.0	14.0	28.8	41
CONVERGYS	370.3	55	1042.5	44	25.6	-3	46.9	-42	6.9	-	7.7	38
ELECTRONIC DATA SYSTEMS	4352.7	14	12480.8	13	195.1	-15	601.2	34	4.5	6.2	15.7	23



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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
FIRST DATA	1279.5**	1	3762.9	-2	187.2	-4	363.3	20	14.6	15.0	11.0	28
FISERV	309.5	30	894.6	27	28.9	25	84.7	27	9.3	9.7	13.2	36
GALILEO INTERNATIONAL	377.5	15	1135.1	20	51.2	244	167.5	55	13.6	4.5	22.9	21
HBO & CO.	399.6	30	1119.2	30	83.7	57	224.2	90	20.9	17.3	21.1	46
INACOM	1061.7	5	3201.4	13	11.0	53	31.9	66	1.0	0.7	10.2	8
INGRAM MICRO	5708.0	40	15814.2	38	59.8	35	172.0	38	1.0	1.1	18.8	28
MICROSOFT (6)	3953.0	26	11722.0	23	1683.0	154	4377.0	58	42.6	21.2	30.2	52
NCR	1555.0	-1	4438.0	-3	25.0	NM	73.0	NM	1.6	NM	8.6	32
ORACLE (7)	1749.1	28	5910.4	26	195.0	NM	812.9	51	11.1	0.6	32.5	30
PEOPLESOFT	221.5	62	949.5	71	44.2	54	117.1	70	12.6	13.2	25.3	35
SABRE GROUP HOLDINGS	604.0	32	1735.0	29	72.0	29	212.0	17	11.9	12.3	26.5	21
SAFEGUARD SCIENTIFICS	609.1	21	1653.5	14	59.2	NM	70.3	357	9.7	1.0	26.5	12
3COM (7)	1405.5	-12	4031.2	-9	93.7	NM	171.1	1	6.7	NM	6.1	74
VANSTAR (8)	655.2	4	2071.6	18	-10.4	NM	9.6	-39	NM	1.0	9.6	26

19 PAPER & FOREST PRODUCTS

INDUSTRY COMPOSITE	25122.3	1	74012.6	1	621.1	-17	2381.5	42	2.5	3.0	4.3	50
(A) FOREST PRODUCTS												
GROUP COMPOSITE	4314.4	2	12580.7	1	-145.2	NM	94.3	NM	NM	NM	-0.7	NM
GEORGIA-PACIFIC GROUP	3367.0	1	9835.0	1	39.0	-5	85.0	372	1.2	1.2	-0.6	NM
LOUISIANA-PACIFIC	606.3	-2	1777.8	-2	-192.7	NM	-13.9	NM	NM	NM	-2.8	NM
UNIVERSAL FOREST PRODUCTS	341.1	17	967.9	13	8.5	55	23.2	24	2.5	1.9	11.4	15
(B) PAPER												
GROUP COMPOSITE	20807.9	0	61431.9	1	766.3	-5	2287.2	33	3.7	3.9	5.0	45
BOISE CASCADE	1598.0	11	4625.9	14	47.1	NM	-17.4	NM	2.9	NM	-2.4	NM
BOWATER	576.9	52	1355.8	25	-44.5	NM	-0.8	NM	NM	4.4	-1.4	NM
CHAMPION INTERNATIONAL	1358.0	-8	4308.8	1	31.3	55	82.4	NM	2.3	1.4	-14.0	NM
CONSOLIDATED PAPERS	491.6	24	1517.0	30	17.2	-28	87.9	7	3.5	6.0	9.1	18
FORT JAMES	1841.9	1	5494.5	0	150.7	119	404.5	28	8.2	3.8	18.9	51
INTERNATIONAL PAPER	4900.0	-4	14475.0	-4	21.0	-79	182.0	NM	0.4	2.0	3.5	45
KIMBERLY-CLARK	3099.7	0	9189.6	-3	340.0	8	937.7	-9	11.0	10.2	18.5	34
MEAD	1009.3	-2	2899.2	1	35.4	-35	109.2	-15	3.5	5.3	6.2	24
POTLATCH	404.6	2	1207.6	2	12.5	-11	33.3	10	3.1	3.6	4.2	27
UNION CAMP	1107.3	-2	3385.9	3	-21.8	NM	23.7	-50	NM	2.4	2.8	54
WESTVACO (2)	727.8	-1	2154.1	-2	31.7	-16	98.8	-11	4.4	5.1	6.7	16
WEYERHAEUSER	2736.0	-3	8015.0	-4	110.0	-4	264.0	8	4.0	4.0	7.9	26
WILLAMETTE INDUSTRIES	956.8	8	2803.3	7	35.7	73	81.8	58	3.7	2.3	5.1	34

20 TELEVISION & BROADCASTING

INDUSTRY COMPOSITE	14613.1	9	42818.5	11	1813.9	278	3414.5	86	12.4	3.6	8.0	54
(A) BROADCASTING												
GROUP COMPOSITE	2637.5	31	8111.1	36	1024.1	NM	963.9	NM	38.8	NM	6.2	43
CBS	1581.0	23	5014.0	29	-38.0	NM	-15.0	NM	NM	NM	-0.3	NM
COX COMMUNICATIONS	416.0	2	1230.1	3	1067.0	NM	952.8	NM	NM	NM	23.0	17
USA NETWORKS	640.5	96	1867.0	114	-4.8	NM	26.0	167	NM	1.1	1.2	NM
(B) PUBLISHING												
GROUP COMPOSITE	11975.6	5	34707.4	7	789.8	37	2450.6	22	6.6	5.1	9.1	58
BELO (A.H.)	332.6	4	1028.3	16	9.7	-35	53.2	-10	2.9	4.7	6.0	29
DOW JONES	443.6	-30	1666.2	-12	25.9	-4	8.9	-90	5.8	4.2	NM	NM
GANNETT	1226.1	7	3730.1	9	176.5	16	742.2	54	14.4	13.3	24.6	18
HOUGHTON MIFFLIN	446.9	12	721.2	8	92.4	11	62.6	-7	20.7	20.8	22.3	25
KNIGHT-RIDDER	752.8	1	2276.0	10	57.0	-22	225.3	-27	7.6	9.8	19.8	16
MCGRAW-HILL	1206.4	5	2791.0	6	169.4	18	267.4	20	14.0	12.5	23.3	27
NEW YORK TIMES	682.7	0	2154.5	3	55.0	19	202.3	11	8.1	6.8	16.7	20
PRIMEDIA	392.3	6	1127.3	3	-9.2	NM	-26.1	NM	NM	NM	NM	NM
READER'S DIGEST ASSOCIATION (6)	575.0	2	1834.8	-2	2.5	NM	22.5	NM	0.4	NM	32.9	31
SCRIPPS (E.W.)	343.4	20	1057.2	20	26.1	-32	87.6	-18	7.6	13.5	12.6	26
TIME WARNER†	3578.0	11	10387.0	10	39.0	NM	78.0	44	1.1	NM	0.1	NM
TIMES MIRROR	729.4	4	2199.3	5	-19.6	NM	72.2	-55	NM	7.7	151.8	36
TRIBUNE	757.1	9	2215.4	10	83.3	-20	301.0	7	11.0	15.1	23.2	19
WASHINGTON POST	509.2	6	1519.0	6	81.8	14	353.5	85	16.1	15.0	31.3	12

21 TELEVISION & BROADCASTING

INDUSTRY COMPOSITE	70023.4	27	186397.5	23	1644.8	-6	5219.5	43	2.3	3.2	11.8	25
(A) CONSTRUCTION & ENGINEERING												
GROUP COMPOSITE	6932.8	-1	19861.5	1	-32.2	NM	247.2	207	NM	1.1	11.1	16
FLUOR (2)	3528.9	-4	10210.0	-1	62.4	-6	171.5	195	1.8	1.8	17.1	12
FOSTER WHEELER	1101.5**	5	3193.4	2	-154.6	NM	-116.8	NM	NM	NM	-18.4	NM
MCDERMOTT (J. RAY) (9)†	349.1	-31	1132.8	-12	42.9	127	142.2	NM	12.3	3.7	26.8	8

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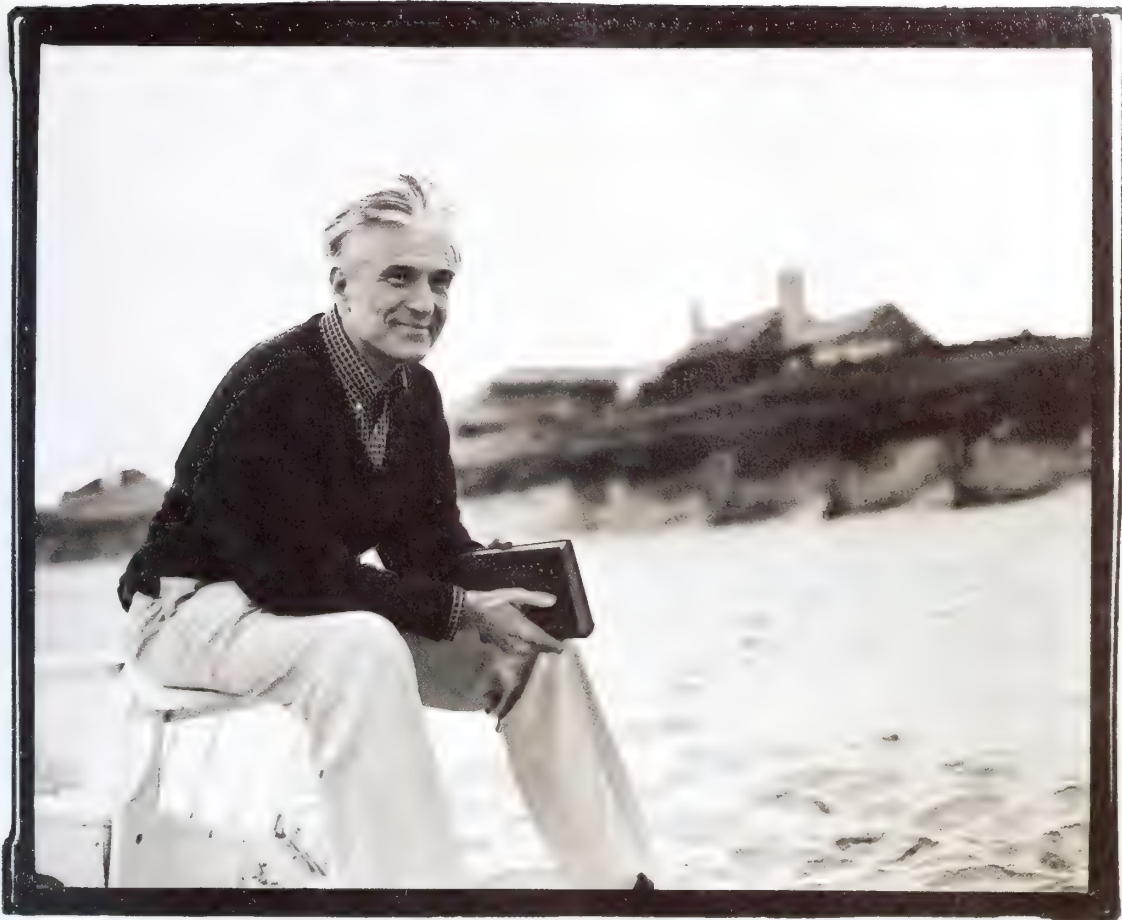
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COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997	3RD QUARTER 1998 \$ MIL.	CHANGE FROM 1997	9 MONTHS 1998 \$ MIL.	CHANGE FROM 1997	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
MORRISON KNUDSEN (1)	497.8	1%	1318.9	7	9.6	16	26.9	19	1.9	1.9	10.1	15
STONE & WEBSTER	350.4	-5	961.4	-4	2.2	-77	10.4	-57	0.6	2.5	5.5	21
TURNER	1105.1**	12	3045.1	14	5.3	138	13.0	156	0.5	0.2	17.3	12
(B) INDUSTRIAL DISTRIBUTION												
GROUP COMPOSITE	33384.7	35	84511.7	25	479.4	-12	1663.4	42	1.4	2.2	9.3	24
AIRGAS (9)	396.6	10	1185.8	19	10.5	-52	16.6	-30	2.6	6.0	6.5	29
ALLEGIANCE	1147.1	6	3370.3	5	33.0	43	92.0	39	2.9	2.1	12.7	38
APPLIED INDUSTRIAL TECHNOLOGIES (6)	379.2	10	1157.2	22	1.4	-70	19.3	-5	0.4	1.3	9.3	11
ARROW ELECTRONICS	2134.8	10	6184.5	9	35.6	283	113.5	2	1.7	0.5	11.3	13
AVNET (6)	1581.6	13	4638.3	11	15.7	-63	72.9	-47	1.0	3.0	9.3	16
BOISE CASCADE OFFICE PRODUCTS	760.4	12	2253.1	20	11.8	-6	43.1	10	1.6	1.8	11.3	10
BRIGHTPOINT	445.8	83	1118.9	69	9.4	59	27.3	69	2.1	2.4	14.8	18
CELLSTAR (1)	501.8	13	1354.2	26	2.4	-85	33.2	-9	0.5	3.7	25.7	8
DYNEGY	4586.5	25	11180.3	16	43.6	74	79.4	29	1.0	0.7	-7.2	NM
ENRON	11320.0	95	23559.0	64	168.0	25	527.0	NM	1.5	2.3	10.2	25
GENUINE PARTS	1760.1	13	4912.6	9	86.1	3	252.0	3	4.9	5.4	17.4	16
GRAINGER (W.W.)	1120.0	5	3296.1	6	56.1	-1	172.5	2	5.0	5.3	17.2	19
HUGHES SUPPLY (11)	674.6	37	1737.1	32	19.8	40	40.3	29	2.9	2.9	12.1	11
MARSHALL INDUSTRIES (7)	460.9	42	1246.6	31	7.9	-15	22.5	27	1.7	2.9	7.9	15
METALS USA	438.4	135	1094.1	99	11.9	138	31.3	111	2.7	2.7	NA	10
NATIONAL-OILWELL	306.5	16	903.2	28	21.6	128	66.5	120	7.0	3.6	27.4	10
PIONEER-STANDARD ELECTRONICS (9)	559.5	30	1537.4	26	6.5	-15	19.2	-12	1.1	1.7	10.9	9
PLAINS RESOURCES	393.6	78	776.0	26	3.6	31	6.5	-35	0.9	1.3	7.3	39
PSS WORLD MEDICAL (9)	366.1	14	1058.8	23	13.9	78	16.2	10	3.8	2.4	7.7	60
RELIAANCE STEEL & ALUMINUM	357.8	41	999.5	43	11.9	42	36.2	53	3.3	3.3	13.4	12
RYERSON TULL	678.8	-5	2128.8	1	4.7	-58	36.4	-23	0.7	1.6	11.3	9
UNISOURCE WORLDWIDE (3)	1858.8	-2	5548.1	3	-127.5	NM	-131.2	NM	NM	0.8	-27.8	NM
UNITED STATIONERS	795.4	22	2259.9	19	19.9	68	42.2	33	2.5	1.8	5.4	65
VWR SCIENTIFIC PRODUCTS	360.5	10	1012.0	9	11.7	40	28.5	58	3.3	2.6	9.4	20
(C) POLLUTION CONTROL												
GROUP COMPOSITE	2176.9	-1	6326.2	-3	165.1	2	430.1	172	7.6	7.3	25.2	23
ALLIED WASTE INDUSTRIES	334.3	8	959.5	10	11.1	-50	36.2	-30	3.3	7.2	8.5	45
BROWNING-FERRIS INDUSTRIES (3)	1052.6	-25	3401.0	21	85.1	-14	262.6	24	8.1	7.1	19.1	18
REPUBLIC SERVICES	355.0	23	991.7	19	47.1	45	130.0	59	13.3	11.3	NM	24
SAFETY-KLEEN (4)	435.0	107	973.9	92	21.8	161	1.3	NM	5.0	4.0	3.3	75
(D) PRINTING & ADVERTISING												
GROUP COMPOSITE	4537.3	16	13067.5	17	256.4	36	781.5	45	5.7	4.8	20.6	25
BANTA	343.7	15	990.5	17	16.2	190	40.7	44	4.7	1.9	13.3	13
BIG FLOWER PRESS HOLDINGS	440.1	29	1236.9	29	13.0	115	22.4	85	3.0	1.8	-26.8	NM
DONNELLEY (R.R.)	1274.5	4	3604.0	4	99.2	22	282.3	75	7.8	6.7	23.8	19
INTERPUBLIC GROUP	861.4**	18	2609.1	17	45.2	45	197.4	28	5.2	4.2	24.1	27
OMNICOM GROUP	981.6	31	2894.1	30	53.8	30	190.7	29	5.5	5.6	24.6	31
WORLD COLOR PRESS	636.0	14	1732.9	20	29.0	27	48.1	32	4.6	4.1	11.1	17
(E) OTHER SERVICES												
GROUP COMPOSITE	22991.7	33	62630.6	33	776.0	0	2097.3	24	3.4	4.5	10.9	29
ABM INDUSTRIES (2)	381.0**	24	1108.8	24	9.5	27	22.4	23	2.5	2.4	13.8	21
ACNIELSEN	364.7	5	1037.0	1	17.7	29	35.6	80	4.9	3.9	11.3	31
ADMINISTAFF	431.5	43	1187.6	41	3.8	30	5.2	35	0.9	1.0	10.7	55
AMKOR TECHNOLOGY	386.7	2	1143.2	10	20.9	10	51.3	166	5.4	5.0	NA	NA
BORG-WARNER SECURITY	336.6	2	979.1	1	6.8	1	6.7	-63	2.0	2.0	16.0	28
CARMAX GROUP (10)	400.0	94	1009.5	95	-3.0	NM	-28.3	NM	NM	NM	-10.5	NM
CASEY'S GENERAL STORES (8)	333.9*	4	885.1	3	12.5	19	24.6	24	3.7	3.3	12.9	21
CDI	389.5	2	1157.1	3	12.3	-10	32.4	-11	3.2	3.6	18.5	10
CENDANT	1457.8**	23	3847.4	23	123.1	-39	461.9	87	8.4	17.1	10.4	38
CINTAS (7)	354.3	30	1065.2	23	33.9	20	104.7	14	9.6	10.4	18.7	43
GROUP 1 AUTOMOTIVE	472.1	98	1157.5	68	6.5	81	15.3	68	1.4	1.5	NA	NA
INTERIM SERVICES	498.1	9	1375.9	15	17.0	41	41.2	35	3.4	2.6	7.3	17
KELLY SERVICES	1032.9	1	2993.5	1	24.9	6	60.6	6	2.4	2.4	14.6	14
MANPOWER	2377.8	21	6386.7	21	42.9	-19	90.8	-24	1.8	2.7	19.2	15
NORRELL (2)	351.2	6	1037.7	11	10.5	14	28.4	14	3.0	2.8	11.8	14
NOVA	307.2	82	822.9	73	5.2	-49	28.9	11	1.7	6.1	7.5	51
NOVACARE (6)	478.2	34	1394.6	42	5.7	-41	32.8	1	1.2	2.9	9.2	5
NOVACARE EMPLOYEE SERVICES (6)	389.2	46	1091.4	68	2.0	116	5.4	246	0.5	0.4	10.1	25
OLSTEN	176.5	10	336.1	11	12.5	-50	-8.1	NM	1.1	2.4	1.9	48
PITTSBURY BRINK'S GROUP	381.5	36	1051.6	31	20.0	3	57.6	10	5.2	6.9	18.2	15
QUINTILES TRANSNATIONAL	303.5	47	848.4	46	20.9	47	58.9	53	6.9	6.9	17.5	46
REPUBLIC INDUSTRIES	4868.6	67	12661.8	72	179.7	47	384.2	68	3.7	4.2	8.5	22
ROBERT HALF INTERNATIONAL	470.7	39	1314.1	41	35.0	42	96.3	44	7.4	7.3	24.6	31
SERVICE CORP. INTERNATIONAL	712.5	19	2101.6	12	83.2	14	282.9	0	11.7	12.1	12.8	25



*Go confidently in the direction of your dreams.
Live the life you've imagined.*

—Henry David Thoreau

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 10-30
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %		
SERVICEMASTER	1273.1	17	3499.5	20	56.4	20	142.0	16	4.4	4.3	20.3	34
STAFF LEASING	607.3	26	1729.2	30	6.2	-28	17.7	9	1.0	1.8	53.1	9
UNITED AUTO GROUP	897.7	43	2507.4	62	8.2	40	18.7	12	0.9	0.9	-2.4	NM
UNITED RENTALS	379.1	NA	506.4	NA	-10.2	NA	-1.9	NA	NM	NA	NA	NA
VINCAM GROUP	314.8	29	910.6	30	2.5	142	6.7	210	0.8	0.4	19.5	42
VOLT INFORMATION SCIENCES (2)	431.8	18	1205.9	20	4.8	-48	11.7	-45	1.1	2.5	15.8	12
WACKENHUT	438.4	49	1253.7	55	4.5	36	10.8	38	1.0	1.1	2.0	NM

22 TELECOMMUNICATIONS

INDUSTRY COMPOSITE	72243.6	14	204776.5	12	3826.9	-21	14347.8	-1	5.3	7.6	14.5	41
(A) EQUIPMENT & SERVICES												
GROUP COMPOSITE	34701.6	21	94994.8	16	-153.5	NM	408.5	-89	NM	2.9	3.1	NM
ADC TELECOMMUNICATIONS (2)	362.5	24	983.5	19	40.6	24	100.4	39	11.2	11.2	15.9	22
AIRTOUCH COMMUNICATIONS†	1421.0	55	3727.0	40	213.0	51	560.0	66	15.0	15.4	7.2	54
AT&T	13653.0	4	39695.0	3	2096.0	94	3151.0	5	15.4	8.2	19.2	25
CENTURY TELEPHONE ENTERPRISES†	401.9	84	1162.0	85	54.7	32	176.6	12	13.6	19.0	19.5	19
EXCEL COMMUNICATIONS	475.3	46	1459.6	48	36.3	9	96.1	-9	7.6	10.2	9.9	42
LUCENT TECHNOLOGIES (3)	8038.0	16	21423.0	16	388.0	NM	178.0	NM	4.8	NM	19.7	NM
MCI WORLDCOM	3758.0	97	8661.0	61	-2944.0	NM	-3027.0	NM	NM	4.0	-19.1	NM
NEXTEL COMMUNICATIONS	506.6	144	1255.1	171	-401.9	NM	-1147.5	NM	NM	NM	NM	NM
QWEST COMMUNICATIONS INTERNATIONAL	806.8	327	1377.6	181	-5.0	NM	-888.1	NM	NM	6.8	-23.8	NM
SPRINT	4062.2	7	11940.3	8	239.3	13	669.3	-12	5.9	5.6	9.3	39
TELEPHONE & DATA SYSTEMS†	478.7	31	1322.7	34	6.3	-30	66.8	162	1.3	2.5	1.5	83
TELLABS	423.5	37	1138.8	34	87.8	36	275.0	48	20.7	20.8	28.6	29
U.S. CELLULAR†	313.9	35	849.2	34	35.4	-2	197.9	129	11.3	15.6	12.0	14

(B) TELEPHONE COMPANIES

GROUP COMPOSITE	37542.0	8	109781.6	8	3980.5	0	13939.3	29	10.6	11.5	27.4	25
ALLTEL	1332.2	16	3820.6	14	-28.0	NM	373.7	-18	NM	13.2	16.2	19
AMERITECH	4290.0	7	12712.0	7	645.0	5	2845.0	69	15.0	15.3	32.0	17
BELL ATLANTIC	7909.9	5	23488.8	4	-7.2	NM	1929.6	27	NM	NM	21.8	29
BELLSOUTH	5865.0	13	16955.0	13	814.0	-31	2524.0	0	13.9	22.8	20.5	24
CINCINNATI BELL	578.4	34	1653.7	28	48.4	-7	113.7	-30	8.4	12.0	22.3	25
FRONTIER	658.2	9	1938.5	9	45.8	41	127.3	128	7.0	5.4	11.5	41
GTE	6480.0	9	18642.0	10	822.0	9	1637.0	-22	12.7	12.7	29.9	24
SBC COMMUNICATIONS	6776.0	7	19791.0	9	1207.0	48	3085.0	248	17.8	12.9	31.9	23
SOUTHERN NEW ENGLAND TELECOMMS.	540.3**	6	1606.0	7	54.5	11	164.0	13	10.1	9.6	29.3	NA
U S WEST	3112.0	5	9174.0	6	379.0	-10	1140.0	9	12.2	14.3	209.6	NA

23 TRANSPORTATION

INDUSTRY COMPOSITE	48390.5	3	140727.1	4	2766.9	-20	7202.4	-6	5.7	7.3	14.5	15
(A) AIRLINES												
GROUP COMPOSITE	22879.6	1	66828.2	3	1370.1	-28	3915.8	-4	6.0	8.5	25.7	10
ALASKA AIR GROUP	539.4	8	1440.7	9	45.4	8	97.4	70	8.4	8.4	14.8	8
AMERICA WEST HOLDINGS	499.3**	8	1516.2	8	21.9	22	88.4	61	4.4	3.9	16.4	7
AMR	5046.0	7	14604.0	7	431.0	34	1124.0	47	8.5	6.8	20.1	9
CONTINENTAL AIRLINES	2116.0	12	6006.0	12	73.0	-36	321.0	2	3.5	6.0	36.4	8
DELTA AIR LINES (6)	3802.0	7	10953.0	4	327.0	29	884.0	19	8.6	7.1	26.4	8
NORTHWEST AIRLINES	1928.1	-31	6832.6	-12	-223.8	NM	-104.2	NM	NM	10.4	NM	NM
SOUTHWEST AIRLINES	1094.8	10	3116.3	10	129.6	40	333.0	40	11.8	9.3	18.5	18
TRANS WORLD AIRLINES	863.2	-5	2512.1	0	-0.9	NM	-30.3	NM	NM	1.5	-33.2	NM
UAL	4783.0	3	13280.0	1	425.0	-27	768.0	-17	8.9	12.5	23.5	10
US AIRWAYS GROUP	2207.9	4	6567.3	2	141.9	-24	434.5	-20	6.4	8.8	84.0	6

(B) RAILROADS

GROUP COMPOSITE	8525.2	-2	25314.5	-2	742.2	-21	1727.1	-29	8.7	10.8	7.6	25
BURLINGTON NORTHERN SANTA FE	2307.0	8	6688.0	7	317.0	12	859.0	29	13.7	13.2	14.3	14
CSX	2432.0	-8	7387.0	-6	187.0	-9	429.0	-27	7.7	7.8	10.8	14
KANSAS CITY SOUTHERN INDUSTRIES	334.2**	22	952.5	25	55.2	32	160.1	57	16.5	15.3	5.1	NM
NORFOLK SOUTHERN	1048.0**	0	3193.0	1	151.0	-11	470.0	-2	14.4	16.1	12.0	18
UNION PACIFIC	2404.0	-7	7094.0	-9	32.0	-86	-191.0	NM	1.3	9.2	-4.5	NM

(C) TRANSPORTATION SERVICES

GROUP COMPOSITE	13027.8	10	37026.7	12	566.0	16	1313.9	43	4.3	4.1	12.8	15
AIR EXPRESS INTERNATIONAL	373.0	-6	1123.8	-1	13.0	-3	36.4	4	3.5	3.4	16.6	14
AIRBORNE FREIGHT	769.1	-2	2283.4	6	32.8	-30	99.0	11	4.3	5.9	17.5	9
AVIS RENT A CAR	652.4	12	1739.1	14	30.1	117	59.9	122	4.6	2.4	9.5	12
BUDGET GROUP	856.6**	63	1926.9	98	61.3	98	62.6	95	7.2	5.9	10.3	9
CNF TRANSPORTATION	1282.5	14	3572.0	16	44.0	11	104.2	14	3.4	3.5	17.7	13
FDX (7)	4082.3	6	12146.6	7	149.4	-9	332.9	80	3.7	4.3	11.8	16
FRITZ (7)	342.3	5	972.1	7	6.7	75	14.1	NM	2.0	1.2	8.1	15
GATX	459.5	7	1306.0	4	38.1	36	106.3	19	8.3	6.5	-4.8	NM
HERTZ	1225.1	11	3172.3	7	118.7	27	229.1	37	9.7	8.5	21.5	15

PORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 10-30	12 MONTHS' EARNINGS PER SHARE
	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 \$ MIL	CHANGE FROM 1997 %	9 MONTHS 1998 \$ MIL	CHANGE FROM 1997 %	3RD QUARTER 1998 %	3RD QUARTER 1997 %			
ION BAX GROUP	460.6**	4	1296.3	7	-21.8	NM	-23.8	NM	NM	3.6	-3.6	NM	-0.56
SON (C.H.) WORLDWIDE	516.2	11	1531.0	16	11.9	20	31.9	18	2.3	2.1	10.7	57	0.39
SYSTEM	1290.8	7	3818.0	5	37.1	5	119.6	8	2.9	2.9	15.3	11	2.25
Y INDUSTRIES (9)	717.4	28	2139.1	30	44.8	NM	141.6	151	6.2	NM	18.7	9	4.10
RUCKING & SHIPPING													
P COMPOSITE	3957.9	3	11557.8	4	88.6	-12	245.6	8	2.2	2.6	12.1	12	1.50
NDER & BALDWIN	326.4**	0	983.6	5	13.8	-37	46.5	-24	4.2	6.7	9.3	14	1.47
ISAS BEST	431.5	1	1236.3	-1	8.1	-13	19.1	19	1.9	2.2	12.4	5	0.99
LIDATED FREIGHTWAYS	571.2	-5	1668.7	-3	9.2	-22	23.7	8	1.6	2.0	8.8	12	0.91
(J.B.) TRANSPORT SERVICES	473.4	22	1347.8	18	10.8	464	36.0	726	2.3	0.5	12.0	14	1.17
TAR SYSTEM	324.0	7	949.7	6	9.2	11	23.2	33	2.9	2.7	28.1	13	2.64
VAY EXPRESS	617.1	-4	1848.2	0	4.3	-58	16.2	-31	0.7	1.6	11.4	9	1.46
IGHTWAYS	469.3	19	1358.7	20	19.5	11	51.3	23	4.2	4.5	15.6	10	2.50
N	744.9	-2	2164.8	0	13.5	-29	29.6	-28	1.8	2.5	11.5	11	1.46
UTILITIES													
TRY COMPOSITE	92853.7	28	239284.1	23	7787.1	8	16095.8	-4	8.4	10.0	9.4	20	1.73
ELECTRIC, WATER & COGENERATION													
P COMPOSITE	83006.1	30	208250.2	23	8025.5	16	15848.8	5	9.7	10.8	10.2	18	1.90
	612.0	71	1752.0	99	79.0	58	215.0	63	12.9	14.0	17.7	27	1.50
YENY ENERGY	726.6	22	1999.7	14	85.0	10	221.8	5	11.7	13.0	14.5	13	2.39
N	1117.1	7	2639.7	2	239.7	10	369.6	6	21.5	21.0	13.7	13	2.97
CAN ELECTRIC POWER	4638.1	193	9546.6	114	198.2	-3	472.2	-7	4.3	12.9	12.4	16	3.09
ORE GAS & ELECTRIC	934.0	8	2567.7	3	167.6	-2	311.0	20	17.9	19.9	10.7	15	2.10
ERGY	486.4	-7	1266.9	-8	75.5	-7	132.7	-3	15.5	15.6	12.1	15	2.70
ERGY	600.9	14	1813.3	15	47.6	3	107.4	3	7.9	8.8	7.1	27	1.00
NA POWER & LIGHT	946.2	4	2434.6	6	186.0	11	338.1	11	19.7	18.5	14.8	16	2.91
AL & SOUTH WEST	1581.0	7	4182.0	6	235.0	18	406.0	33	14.9	13.5	12.0	14	1.99
Y	1976.5	46	4380.3	35	110.8	29	194.7	-26	5.6	6.3	12.0	18	1.90
ERGY	1286.0	25	3792.0	13	86.0	30	206.0	0	6.7	6.4	13.6	19	2.35
TIV	1012.5	153	2200.1	108	98.6	150	142.2	71	9.7	9.8	8.2	15	1.54
LIDATED EDISON	2061.6	2	5475.7	0	351.6	-1	594.5	4	17.1	17.5	12.4	16	3.07
ION RESOURCES	2803.5	34	7028.2	24	433.4	630	508.0	56	15.5	2.8	11.2	15	3.01
	330.1	11	1015.5	5	47.7	6	153.6	5	14.5	15.2	14.2	15	1.23
	345.0	4	941.8	3	62.1	6	147.4	-2	18.0	17.7	13.6	16	2.50
ERGY	1199.0	16	3208.0	15	133.0	-1	343.0	15	11.1	13.1	12.7	13	3.21
ERGY	5298.2	10	13426.7	15	428.7	39	1036.3	31	8.1	6.4	15.4	20	3.24
INTERNATIONAL	3440.8	26	7593.1	10	226.2	21	535.6	-10	6.6	10.5	12.8	15	1.76
EAST	692.2	40	1859.9	20	47.3	67	157.4	15	6.8	5.7	11.4	16	3.00
Y	4587.4	64	9409.4	34	262.6	181	538.6	42	5.7	3.3	6.1	17	1.68
ERGY	1416.7	117	3893.8	110	181.6	90	393.0	53	12.8	14.7	9.6	16	1.91
A PROGRESS	1031.5	12	2722.1	10	117.7	44	246.8	88	11.4	8.9	10.8	24	1.75
UP	1999.0	8	5030.0	3	290.0	8	581.0	7	14.5	14.4	13.4	16	3.83
	1168.8	5	3227.0	4	131.7	565	351.3	40	11.3	1.8	13.7	12	3.47
AN ELECTRIC INDUSTRIES	377.3	2	1112.8	3	29.3	1	78.0	7	7.8	7.8	11.7	13	3.04
ON INDUSTRIES	3468.8	61	8844.2	116	247.4	1	260.4	-39	7.1	11.3	5.4	35	0.90
P	392.4	81	852.2	58	23.7	12	74.9	5	6.0	9.7	12.4	13	2.39
IA	823.3	-2	1946.0	0	31.6	-53	17.5	-89	3.8	8.0	-2.5	NM	-0.45
TATE ENERGY	555.3	0	1602.6	-7	53.4	4	79.8	-35	9.6	10.0	5.5	20	1.51
S CITY POWER & LIGHT	313.5	8	748.6	7	58.9	1	111.8	67	18.8	20.0	13.3	15	1.90
ERGY	603.9	31	1495.7	17	80.6	12	142.9	-8	13.4	15.6	13.4	18	1.50
ERICAN ENERGY HOLDINGS	512.7	18	1377.7	-2	56.9	12	123.1	9	11.1	11.7	11.0	17	1.52
NA POWER	315.2	35	873.9	19	36.8	127	95.2	23	11.7	6.9	13.9	17	2.60
A POWER	327.8	15	692.0	8	62.0	18	79.4	-1	18.9	18.5	9.9	16	1.61
ENTURY ENERGIES	915.9	15	2715.0	10	93.2	41	241.2	31	10.2	8.4	13.3	17	2.90
GLAND ELECTRIC SYSTEM	630.6	0	1822.1	-1	66.8	-4	159.2	5	10.6	11.1	12.8	12	3.39
A MOHAWK POWER	930.6	4	2939.9	-2	17.7	44	-103.4	NM	1.9	3.5	-4.1	NM	-0.85
INDUSTRIES	747.8	25	2179.5	22	45.2	19	139.7	-1	6.1	6.4	15.7	20	1.53
EAST UTILITIES	974.4	0	2808.1	-2	11.1	NM	13.6	NM	1.1	NM	-1.0	NM	-0.46
ERN STATES POWER	766.4	10	2106.4	4	101.7	16	193.9	13	13.3	12.6	10.4	16	1.68
ERGY	617.3	30	1372.3	25	108.1	21	155.6	29	17.5	18.9	17.0	13	2.06
ORP	1918.2	59	4380.6	37	34.6	-26	98.9	-56	1.8	3.9	1.0	73	0.26
ERGY	1794.0	40	4174.6	20	274.0	73	539.1	37	15.3	12.4	16.3	19	2.09
	5307.0	31	14447.0	37	210.0	-21	523.0	-19	4.0	6.5	7.8	19	1.58
LE WEST CAPITAL	759.0	14	1644.2	6	129.6	2	215.0	-5	17.1	19.2	11.1	16	2.66
AC ELECTRIC POWER	750.8	19	1659.7	13	153.1	13	226.6	8	20.4	21.5	9.3	18	1.49
ESOURCES	1165.0	47	2884.0	26	141.0	194	309.0	29	12.1	6.1	20.9	12	2.18
SERVICE CO. OF NEW MEXICO	320.4	12	959.2	16	34.7	43	70.6	9	10.8	8.5	10.5	11	2.06

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les as a wireless modem, any place can become a workplace. And if that place just happens to have a friendly waitress and
e big slice of apple pie, well, that makes it even better. The Amity CN and MobileAccess phone. Just a few more examples of
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ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

Golden West 17c
Goodrich (B.F.) 1
Goodyear Tire & Rubber 2c
GPU 24a
Grace (W.R.) 4
Grainger (W.W.) 21b
Great A&P 10c
Great Lakes Chemical 4
Group 1 Automotive 21e
GTE 22b
Guidant 12d
Gulfstream Aerospace 1

Halliburton 11b
Hanna (M.A.) 4
Hannaford Brothers 10c
Harcourt General 5
Harley-Davidson 14d
Harman International 6b
Harnischfeger 15c
Harrish's Entertainment 14b
Harris 9b
Harsco 15a
Hartford Financial Services 17b
Hartford Life 17b
Hasbro 14d
Hawaiian Electric 24a
Hayes Lemmerz Intl. 2b
HBO & Co. 18c
Health Management Assocs. 12c
Healthsouth 12c
Heilig-Meyers 6b
Heinz (H.J.) 10b
Heller Financial 17a
Hercules 4
Hershey Foods 10b
Hertz 23c
Hewlett-Packard 18b
Hillenbrand 15a
Hills Stores 8
Hilton Hotels 14c
Home Depot 8
HomeBase 8
HON Industries 18a
Honeywell 9c
Hormel Foods 10b
Host Marriott Services 14a
Houghton Mifflin 20b
Household Intl. 17a
Houston Industries 24a
Howmet International 1
Hubbell 9a
Hughes Electronics 9b
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Hunt (J.B.) 23d
Huntington Bancshares 3b
Hussmann Intl. 13a

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Idacorp 24a
IKON Office Solutions 5
Illinois Tool Works 15a
Illnova 24a
Imation 14d
iMAG 4
InaCom 18c
Ingersoll-Rand 15c
Ingram Micr. 18c
Integrated Health Svcs. 12c
Intel 9d
Interface 15d
Interim Services 21e
International Flavors 4
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International Paper 19b
Interpublic Group 21d
Interstate Bakers 10b
Interstate Energy 24a
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ITT Industries 15c

Jabil Circuit 9d
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Johns Manville 13a
Johnson & Johnson 12d
Johnson Controls 15a
Jones Apparel Group 6a

K N Energy 24b
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Kansas City Power & Light 24a
Kansas City Southern 23b
Kaufman & Broad 13b
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KeySpan Energy 24b
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LandAmerica Financial 17a
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Lear 2b
Leggett & Platt 6b
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Lennar 13b
Lexmark International 18b
LG&E Energy 24a
Liberty Financial 17b
Lilly (Eli) 12b
Limited 8
Lincoln National 17b
Lifton Industries 9b
Liz Claiborne 6a
Lockheed Martin 1
Loews 17b
Longs Drug Stores 12a
Louisiana-Pacific 19a
Lowe's 8
LSI Logic 9d
LTV 16b
Lubrizol 4
Lucent Technologies 22a
Lyondell 4

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Mallinckrodt 12d
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PaineWebber Group 17a
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Parker Hannifin 15a
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Payless ShoeSource 8
PECO Energy 24a
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Pentair 15c
PeopleSoft 18c
Pep Boys 8
PepsiCo 6c
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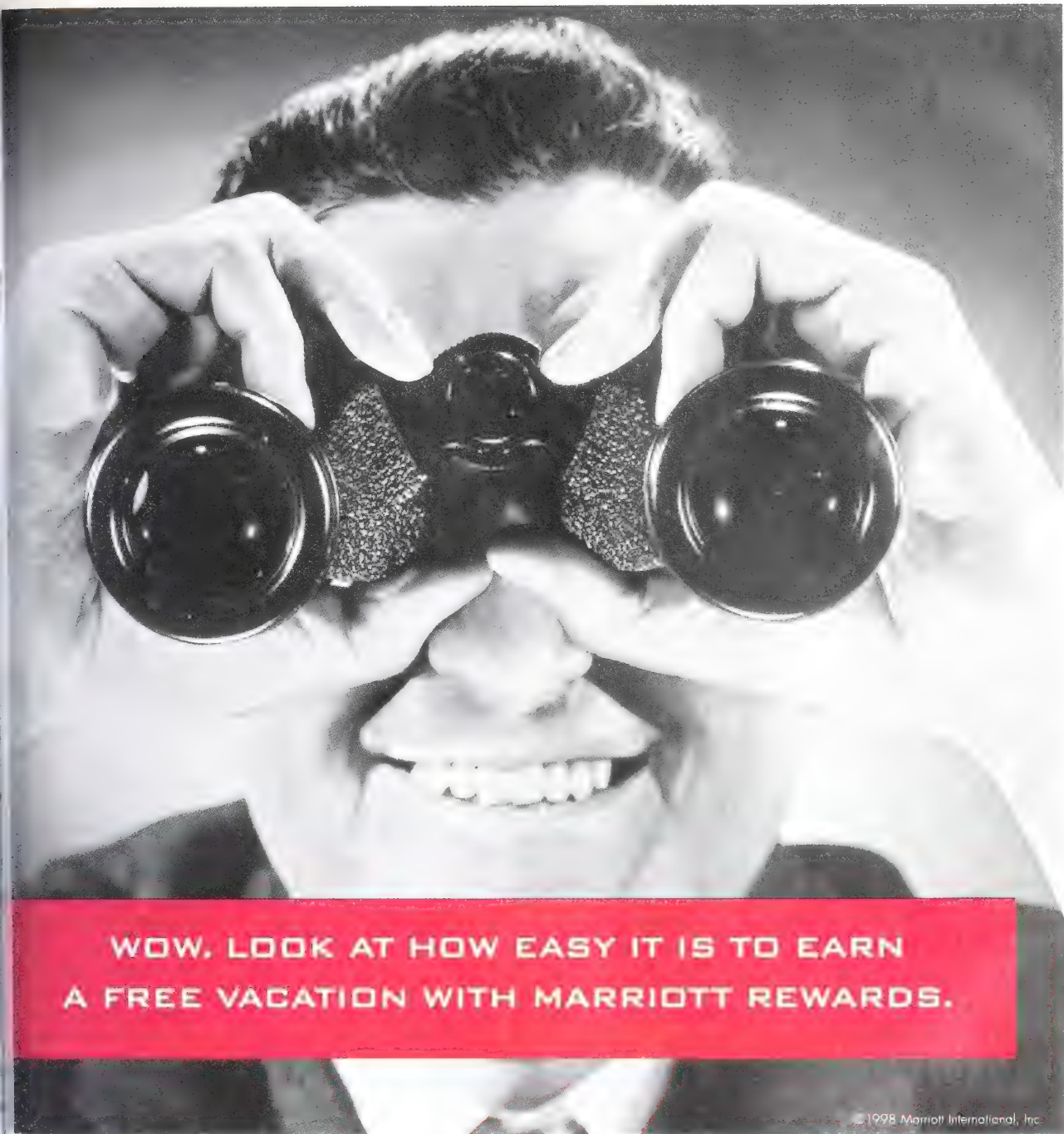
U.S. Bancorp 3b
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Wrigley (Wm.) Jr. 10b

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Yellow 23d
York Intl. 13a



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EDITED BY AMY DUNKIN

TIME TO BUILD A REIT PORTFOLIO?

Real estate investment trusts, with their generous dividends, are supposed to offer protection against stock market declines. But REITs' high yields haven't been much comfort this year. Punished first by fears that a strong economy would spark a glut of new construction, real estate portfolios recovered a bit only to fall victim to global credit jitters this fall. The upshot: Even as the Standard & Poor's 500-stock index is up 16.5% this year, REITs are down 16%. Mutual funds that invest in REITs are even worse off—down an average of 17%.

But some real estate pros contend the worst may be over. With the Federal Reserve cutting interest rates, the economic picture has brightened—though not to the point of reigniting fears of overbuilding. Indeed, REITs are still expected to post profit gains of 11% this year, according to the forecasting firm First Call. Next year, analysts anticipate 7%

to 10% growth—not bad in a climate of anemic blue-chip profits.

Like many other small-company stocks, REIT shares have fallen so far that they're now relatively inexpensive by historical standards. But "yield alone makes them attractive," says Gregory Whyte, managing director at Morgan Stanley Dean Witter. At a time when the dividend yield on the S&P 500 has dipped to a miserly 1.4%, REIT yields are still at 6.8%. Thirty-year Treasuries yield only 5.4% these days, and utility stocks, traditionally favored by income-oriented investors, pay 3.6%.

Still, even REITs' strongest boosters acknowledge that the industry's outlook is not as rosy as it was a few years ago. This year has been a bust for REITs, which were

one of the decade's hottest success stories. REITs, which buy hotels, offices, apartment buildings, and other properties, had given small investors access to a market dominated by wealthy individuals. In fact, before this year's correction, they also gave shareholders average returns of 20% a year since 1991, according to data compiled by the National Association of Real Estate Investment Trusts (NAREIT).

Back then, REITs were benefiting from three factors—improving occupancy rates, rising rents, and conditions of inexpensive property built during a construction boom that fizzled in the early 1990s. Today, though, those growth engines are sputtering. Bargains have evaporated along with vacancies. And occupancy rates are unlikely to increase now that the economy is slowing. Lawrence Raiman, a REIT analyst at Donaldson, Lucien & Jenrette.

SPOILING THE PARTY. If less the economy enters a deep slump, REITs should be able to count on rising rents to prop up earnings, he says. That's because no one wants to finance the new construction that depresses rents, unleashing fresh supply on the market. In the past, when rents soared, developers spoiled the party by investing in a building spree.



YOUR MONEY INVESTING

Standout Funds

FUND	TOTAL RETURN*		YIELD	COMMENT
	3-YR.	YTD		
COLUMBIA REAL ESTATE EQUITY	17.81%	-13.73%	4.93%	35 holdings, all but 2 are REITs
ALPINE U.S. REAL ESTATE EQUITY	15.60	-27.10	1.01	Buys REIT and non-REIT real estate stocks
DAVIS REAL ESTATE	15.59	-17.58	3.92	Currently 80% in REITs
VAN KAMPEN REAL ESTATE SEC.	15.54	-14.60	2.94	Takes a value approach
FBR REALTY GROWTH	14.96	-21.11	1.52	Growth fund with income as secondary goal

*Through Oct. 31

DATA: MORNINGSTAR INC.

velopers has access to money," says Mike Kirby, a principal at Green Street Financial, a research firm specializing in real estate securities. "It's a lot tougher than it was six months ago."

If a cooling economy continues to take the steam out of overheated property values, analysts say some of

tenants are unable to renegotiate the rent when a downturn hits, says David Sherman, managing director and the head of REIT research at Salomon Smith Barney. This recession-proof quality has given REITs a reputation as a safe haven in turbulent times.

True, this year REITs fell woefully short of that mark. But that's because of a rare convergence of several events, including fears of a speculative real estate bubble, the bear market in small-cap stocks, the international liquidity crisis, and a sell-off by traders alarmed by the sector's slowing earnings. Analysts caution that the stocks may remain choppy for the rest of the year as investors unload them for losses to offset taxable gains. "But if you want to be early, buy selectively now," says DLJ's Raiman, who expects returns to range from 10% to 15% over the next year, provided the economic picture does not darken too much.

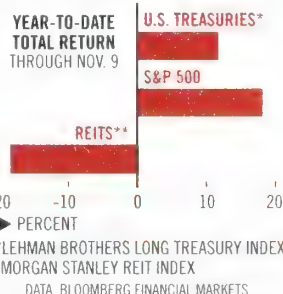
CASH CUSHION. How can you find a good REIT? Stay away from companies that concentrate on areas where construction is strong, such as suburban Dallas and Atlanta, Sherman advises. And think twice about companies that give all their cash to shareholders. Having a cash cushion allows a REIT to raise its dividend even if income slips, says Kevin McDevitt, an analyst at Morningstar,

the strongest REITs may resume the bargain hunting that helped fuel average returns of 36% in 1996 and 18% in 1995 and 1997, respectively, according to NAREIT. Even if the economy falters, REIT stocks should offer protection. Because only 5% to 10% of a typical large office building's leases expire each year, most

the construction boom of the late 1980s was so extreme that commercial properties have only recently recovered, says Janice Condon, director of investment research at Cushman & Wakefield, a real estate firm in New York.

At this time, however, the real estate markets are holding their own. Ambitious developers are not rushing to issue new REITs. They relied on to fund their expansion. And because commercial mortgage-backed securities cannot compete with Treasuries as a safe investment, investors already nervous about real estate have shied from that market, prompting banks to curtail mortgage lending for new construction. "None of the de-

Tough Times For REITs



which tracks mutual-fund performance.

In sizing up debt levels, keep in mind that the industry's average ratio of debt to real estate assets is about 40%. Still, REITs with stable, long-term leases—such as those concentrating on apartments—can afford to go as high as 70%, Sherman says. At the opposite extreme, hotel REITs are riskier, he adds. (You can find additional information about REITs at www.nareit.com.)

REITs with strong balance sheets are also in the best position to take advantage of more reasonable property values, says Joseph Harvey, senior vice-president and director of research at Cohen & Steers, which operates three open-end mutual funds specializing in real estate: Cohen & Steers Equity Income, Realty Shares, and Special Equity. Harvey likes Vornado Realty Trust, which owns shopping centers and offices and—together with another REIT, Crescent Real Estate Equities—controls about 30% of the refrigerat-

Worth a Look

NAME (SYMBOL)	PRICE*	52-WK. HIGH	YIELD	COMMENTS
BRANDYWINE REALTY (BDN)	17 1/2	27 1/2	8.7%	Properties in fast-growing Pa., N.J. markets
KILROY REALTY (KRC)	23 1/2	30	7.0	Dominant office and industrial REIT
MACK-CALI REALTY (CLI)	29 1/2	42 1/2	7.2	Strong balance sheet; 15% growth rate
SUNSTONE HOTEL (SSI)	9	17 1/2	12.7	Trades 35% below estimated asset value
VORNADO REALTY (VNO)	35	49 1/2	5.2	Financially strong; 20% growth rate

*Nov. 9

ed warehouse market. Trading at about 10.2 times next year's expected funds from operations—a term roughly equivalent to cash flow—Vornado commands a slight premium to the market's average multiple of 9.3, Harvey says. At 5.2%, its yield is also a little on the low side for a REIT. But with projected earnings growth of 20% in 1999 and "over \$1 billion in potential buying capacity,"

the stock is worth it, he adds.

PROFITABLE PURSUIT. G. Ken Heebner, managing general partner of the Capital Growth Management Limited Realty fund, expects Prime Group Realty Trust to report earnings gains of 15% in both 1999 and 2000. A Chicago-based office-and-industrial REIT, Prime Group Realty Trust has several strategies, one of which is to

refurbish old buildings. In a market experiencing 13% rent hikes, this is a profitable pursuit. Selling at 7.5 times next year's projected funds from operations, Prime Group Realty can afford to borrow if it spots good opportunities, Heebner says. And at 8.5%, the stock has one of the highest yields around.

If you lack the time or cash to construct a diversi-

fied portfolio of REITs, cull out the 50-odd mutual funds specializing in the sector. With REITs trading at above their October 1998 share prices, investors have reason to be optimistic. The test, however, will be if the stock market turns ugly again: Then REITs show whether their yields can provide much-vaunted downside protection. *Anne Terry*

THE PROS



BUSINESS WEEK's London bureau chief, Stanley Reed:

BEWARE THE OTHER SHOE

Being a bear in the bull market years wasn't easy, but David Roche stood his ground. With markets cooler, he's still bearish—and feeling vindicated. The former head of global strategy and economics for Morgan Stanley Dean Witter, Roche runs Independent Strategy, a London-based investment adviser to hedge funds, corporations, and Middle Eastern and Asian governments. He spoke with

Q: Your bleakest recent predictions have not come to pass. World markets have not fallen 30% to 40%; Brazil has not collapsed. Did you get it wrong?

A: Some of our forecasts have been wrong, but a bevy are still waiting to happen. We had the decline in the Western markets right. We got the emerging-markets crisis right. [Financial collapse in] Brazil and China has not happened. [The collapse of] Brazil, China, and South Africa and the second leg down of the bear market have been put on hold.

Q: Why?

A: We are living in a kind of dream period now. The Fed is bailing out the world.

UNREPENTANT BEAR

Roche believes the current rally can last just three or four months

Japan is about to print 60 trillion yen [\$500 billion] to prop up banks and give \$30 billion to \$100 billion to Asia without any conditionality. The weakened dollar has given emerging markets a huge sigh of relief. The International Monetary

Fund is ready to spend money on anybody it thinks is worthy that might have a crisis. These factors have led to a dramatic rally, but they are temporary—they might last for three or four months. Most of the dream world will start to end before the end of the year.

Q: What is the outlook for the U.S.?

A: It is going to be the least recession-struck economy in the world. The U.S. will go to a growth rate of between zero and 1½%.

Q: Will Federal Reserve Board Chairman Greenspan cut rates some more?

A: Financial markets are saying he will cut 25, 25, 25 [basis points], but Greenspan may hold off for a month. The consumer has not caved in. But I still

think the U.S. will slow, he will cut rates.

Q: How should a U.S. investor allocate assets now?

A: Thirty percent stocks, 50% bonds, 20% cash. There will be an opportunity to buy equities cheaper. I still think the Dow will go to 6000.

Q: Would you buy Japanese equities?

A: No. The valuations are wrong, the outlook for the economy is dreadful, and state is bankrupt.

Q: What's your prognosis for the euro?

A: The euro is going to be a weak currency. The idea the euro can replace the dollar is out of the question. The politics of Europe are moving the wrong way to make it an attractive place for foreigners to put their money.

Q: How about European stocks?

A: I would not touch European stocks or bonds except in Britain. Europe could have a surprise recession with left-wing governments that don't have a clue what to do about it.

Q: Are there markets you like?

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JORDAN: CITY COMFORT AND DESERT MARVELS

On our first day in Jordan, we drove about an hour outside the capital, Amman, to the Roman city of Jerash.

We wandered through sweeping columned avenues, studied the remains of churches and temples, and clambered up rows of seats in a beautifully proportioned amphitheater. As the light faded, the stony hillside took on a timeless quality. Bedouin women, leading sheep and goats home, looked at us warily, and the muezzin's call to prayer drifted over from a mosque across the valley.

If you have never visited the Arab world, Jordan is a good place to start. The little kingdom, about the size of Maine, is hospitable to foreigners and offers desert scenery and marvelous antiquities. It carries traces of many civilizations, from the biblical Ammonites, who gave Amman its name, to the Byzantines, whose magnificent mosaics adorn the Christian city of Madaba. The best

time to go is in the spring. Round-trip coach airfare from New York to Amman runs about \$1,600, and U.S. citizens can obtain visas for \$44 from any Jordanian embassy or at the Amman airport.

When my wife, teenage daughter, and I went this year, we started in Amman. Most of the city is recently built, and it lacks the funky souks of Cairo and Damascus. But the white stone buildings arrayed over dusky hills have a rugged charm. There is a massive Roman theater in the center of town, and a worthwhile archaeological museum. Amman is also a good place to sample Arab food and to shop (table).

We used the city as a base to venture forth in our rented car, returning to the hotel at dusk. The desert to the east offers sweeping horizons of purple sand strewn with bluish basalt pebbles. It also is studded with ancient forts, built to protect the caravan routes from Arabia and as hunting lodges for forgotten rulers. The British adventurer T. E. Lawrence used the

rough-hewn Qasr Azraq, about 60 miles from Amman, as a base for his plottings against the Turks in World War I. Also accessible is Qasr Kharana, a squarish 7th century structure. Qasr Amra, an ancient edifice on the road to Azraq, boasts an early representation of the constellations on a domed ceiling.

On our fourth day, we headed south down the old King's Highway toward Petra, 100 miles away. This is a slower route than the new desert road, but far more exciting. It winds through steep mountain passes, offering heart-stopping views of the dry, rocky cliffs and valleys. Not to be missed is the enormous crusader fort at Karak.

The stronghold of the Nabataeans who inhabited the region during Roman times, Petra is tucked away in an otherworldly range of

PASSAGE TO PETRA

The Nabataean city boasts 1st century ruins and stirring views

wind-carved cliffs. You travel through a twisting, narrow canyon called the Siq, past overhanging rocks, with walls of pink, orange, and red strata that are spectacular enough. As you notice stranger shapes, you see monuments and doorways, tombs. Finally the Siq opens up to a valley with steep cliffs up to 150 feet high. The site is vast, and many of the tombs require hikes up the mountains. But the views are well worth it. On our first days, you can see for miles.

It is also challenging to bargain with the village officials. They have been trying to evict from the site. The daughter's glee, I was amused by a woman with tooos around her eyes, holding some Roman coins. I bought a home in a nearby village, purchased, for about \$12,000, a handsome wool rug we took from several on the floor. The owner said the women in the family had made it.

I speak Arabic, which is useful in getting around. Most Jordanians involved in tourism speak English. A guide, at about \$120 a day, is advisable for more remote parts of Petra or going into the desert. But, with common sense and a guide book, you can tackle most sites in Jordan on your own. Stanley

YOUR LIFE TRAVEL

Trip Tips

LODGING

IN AMMAN Intercontinental Hotel, between 2nd and 3rd Circles, Tel. 962-6-464-1361
Centrally located; \$120 for double room

IN PETRA Taybet Zaman, 9 miles from Petra, Tel. 962-3-2150-111
Converted Arab village; about \$200 for double room

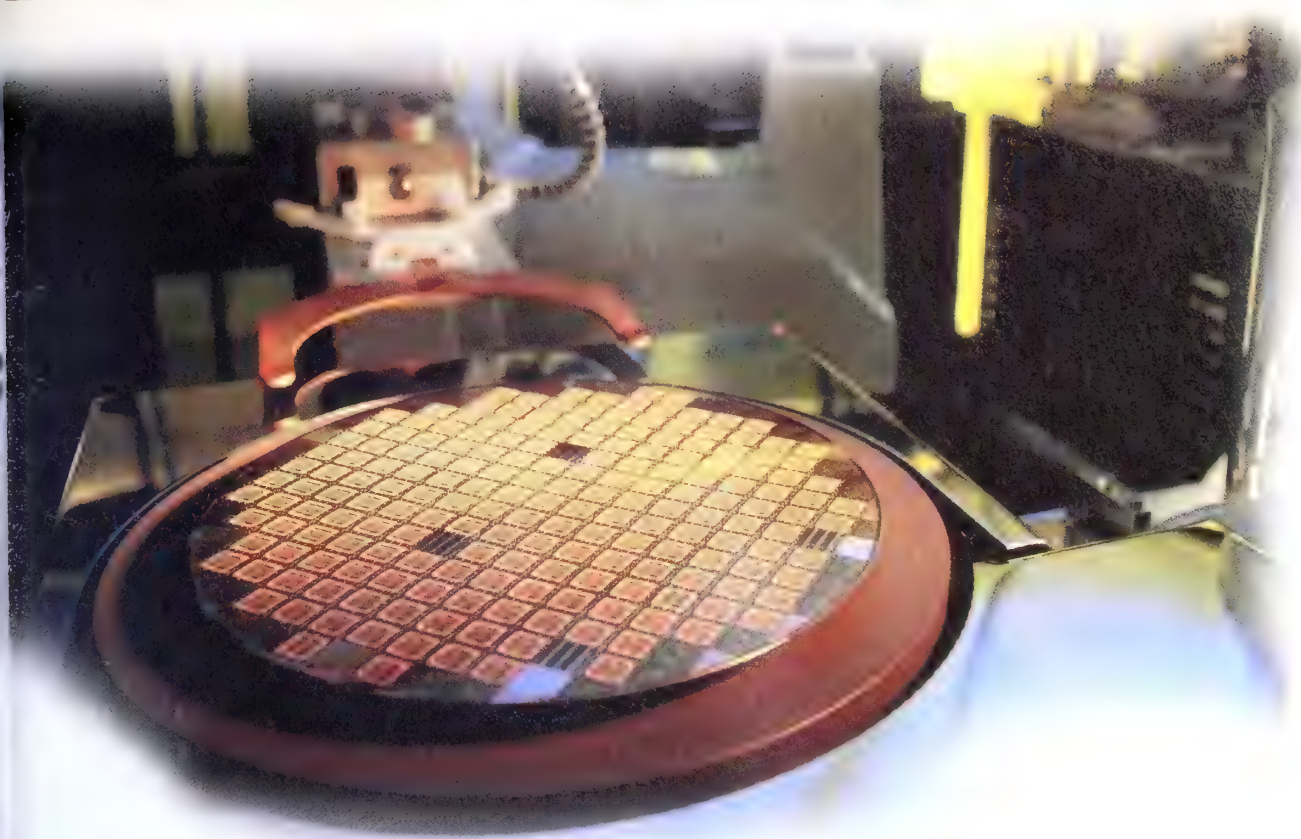
DINING

ARAB CUISINE Fakher Al-Din, near 2nd Circle, Amman, Tel. 641-319

ITALIAN FOOD Romero's, across from the Intercontinental, Amman, Tel. 644-227

SHOPPING

JEWELRY, TEXTILES Alaydi, Circle, Amman, Tel. 644-5



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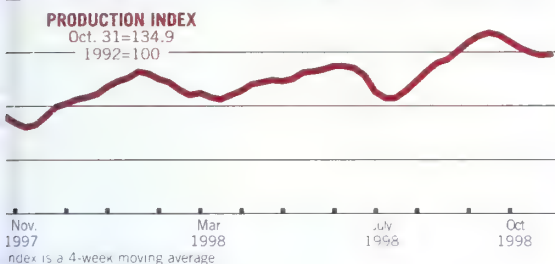
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Business Week Index

PRODUCTION INDEX

Change from last week: 0.1%
Change from last year: 5.0%



The production index was up in the week ended Oct. 31. The unaveraged index increased, to 135.6, from 134.7 in the previous week. After adjustment, rail-freight traffic was up 2.7%, and the Association of American Railroads reported that this week intermodal traffic set a record. Output of electricity, oil, coal, and lumber also increased. For October, the index fell 1.1% to 134.9, from September's reading of 136.4.

Source: Index compiled by The McGraw-Hill Companies.

PRICING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (11/6) S&P 500	1141.01	1098.67	23.0
RATE BOND YIELD, Aaa (11/6)	6.61%	6.47%	4.3
SUPPLY, M2 (10/26) billions	\$4,361.5	\$4,344.2r	8.9
CLAIMS, UNEMPLOYMENT (10/30) thous.	312	301	-1.9
HOUSING APPLICATIONS, PURCHASE (11/6)	291.9	249.3	44.4
HOUSING APPLICATIONS, REFINANCE (11/6)	1,987.0	2,495.7	146.8

S: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

INTEREST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
BANK OF AMERICA (11/9)	4.95%	5.04%	5.50%
COMMERCIAL PAPER (11/10) 3-month	5.15	5.05	5.60
CERTIFICATES OF DEPOSIT (11/10) 3-month	5.30	5.29	5.77
MORTGAGE (11/6) 30-year	7.03	6.96	7.38
TABLE MORTGAGE (11/6) one-year	5.65	5.58	5.65
LIBOR (11/6)	8.00	8.00	8.50

S: Federal Reserve, HSH Associates, Bloomberg Financial Markets

Data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense. nt. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

INDUSTRIAL PRODUCTION

Nov. 16, 9:15 a.m. EST ▶ Output in the industrial sector probably rose by 0.2% in October, according to the median forecast of economists surveyed by Stan-Poor's MMS, a division of The McGraw-Hill Companies. Production fell 0.1% in September, with a broad number of industries showing declines. Capacity utilization rates likely averaged 81% last month, down from 81.1% in September.

COMMODITY PRICE INDEX

Nov. 17, 8:30 a.m. EST ▶ Commodity prices for all goods and services like-ly rose 0.2% in October, after no rise in September. Excluding food and energy, core

prices probably increased 0.2%, the same as in September.

BUSINESS INVENTORIES

Tuesday, Nov. 17, 8:30 a.m. EST ▶ Inventories stored at factories, wholesalers, and retailers probably increased 0.2% in September, after rising 0.3% in August.

FOMC MEETING

Tuesday, Nov. 17 ▶ The S&P MMS forecast expects that the Federal Reserve will cut its federal funds target rate by a quarter-point to 4.75% at this Open Market Committee meeting. The Fed shocked the financial markets on Oct. 15 when it cut between meetings, trimming the fed funds rate from

5.25% to 5.00% and the discount rate from 5.00% to 4.75%.

INTERNATIONAL TRADE

Wednesday, Nov. 18, 8:30 a.m. EST ▶ The trade deficit probably narrowed to \$16 billion in September, from \$16.8 billion in August. Exports continued to fall, but imports, which jumped 2.2% in August, likely fell back sharply in September.

HOUSING STARTS

Thursday, Nov. 19, 8:30 a.m. EST ▶ Housing starts probably stood at an annual rate of 1.58 million in October, unchanged from September's level, projects the S&P MMS survey.

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (11/7) thous. of net tons	1,841	1,920#	-15.7
AUTOS (11/7) units	126,756	132,386r#	-5.6
TRUCKS (11/7) units	146,229	148,588r#	-1.2
ELECTRIC POWER (11/7) millions of kilowatt-hrs.	NA	61,192#	NA
CRUDE-OIL REFINING (11/7) thous. of bbl./day	14,774	14,456#	2.1
COAL (10/31) thous. of net tons	22,359#	22,088	10.3
LUMBER (10/31) millions of ft.	512.8#	498.8	11.3
RAIL FREIGHT (10/31) billions of ton-miles	28.7#	28.3	7.5

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPAl, SFPAl, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (11/11) \$/troy oz.	293.500	289.400	-4.8
STEEL SCRAP (11/10) #1 heavy, \$/ton	85.50	85.50	-40.4
COPPER (11/6) ¢/lb.	76.3	74.9	-18.2
ALUMINUM (11/6) ¢/lb.	62.5	61.8	-19.9
COTTON (11/6) strict low middling 1-1/16 in., ¢/lb.	66.13	65.64	-5.7
OIL (11/10) \$/bbl.	13.18	13.91	-34.8
CRB FOODSTUFFS (11/10) 1967=100	219.52	217.65	-12.7
CRB RAW INDUSTRIALS (11/10) 1967=100	267.22	274.44	-18.7

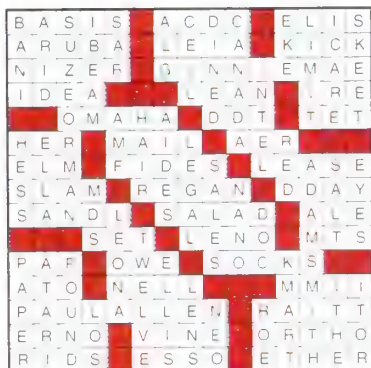
Sources: London Wednesday final setting, Chicago market, Metals Week, Minneapolis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (11/11)	121.65	116.40	126.06
GERMAN MARK (11/11)	1.68	1.67	1.73
BRITISH POUND (11/11)	1.66	1.66	1.70
FRENCH FRANC (11/11)	5.63	5.59	5.78
ITALIAN LIRA (11/11)	1659.0	1649.5	1688.5
CANADIAN DOLLAR (11/11)	1.55	1.52	1.41
MEXICAN PESO (11/11)	10.020	9.950	8.340
TRADE-WEIGHTED DOLLAR INDEX (11/11)	108.0	106.1	106.5

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

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Index to Companies

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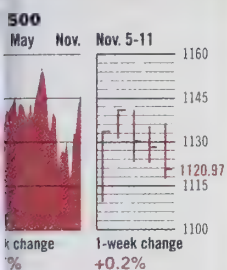
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Investment Figures of the Week

STOCKS



SENTIMENTARY

In an incredible five weeks of U.S. stocks ran into reverse. The Dow Jones industrial average rose to 8975.5 on Nov. 10, giving up 152 points over the next three trading sessions. The Dow's gain for the week was slender 0.5%, the S&P 500 even less. Technology stocks led by the Internet.com, really zoomed. Market leaders like Intel also looked smart, rising over 6% alone on Nov. 10. After announcing higher expected sales. All told, the heavy Bloomberg Information Age Index logged a gain for the week.

U.S. MARKETS

	Latest	% change Week	% change Year
Dow Jones Industrials	8823.8	0.5	19.2
NASDAQ Combined Composite	1862.1	2.1	20.8
S&P MidCap 400	344.8	-0.6	10.5
S&P SmallCap 600	164.2	-0.5	-6.6
S&P SuperComposite 1500	236.5	0.1	21.1

SECTORS

	Latest	% change Week	% change Year
Bloomberg Information Age	397.6	3.8	44.7
S&P Financials	119.0	-2.7	11.6
S&P Utilities	254.1	-0.2	22.3
PSE Technology	376.4	2.2	30.4

FOREIGN MARKETS

	Latest	% change Week	% change Year
London (FT-SE 100)	5476.8	-2.6	16.0
Frankfurt (DAX)	4717.7	-2.6	28.9
Tokyo (NIKKEI 225)	14,428.0	-0.7	-6.5
Hong Kong (Hang Seng)	10,137.3	-3.5	5.5
Toronto (TSE 300)	6279.3	-1.4	-5.5
Mexico City (IPC)	4117.7	-3.5	-5.0

FUNDAMENTALS

	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.40%	1.42%	1.65%
S&P 500 P/E Ratio (Last 12 mos.)	28.8	28.3	23.1
S&P 500 P/E Ratio (Next 12 mos.)*	21.8	21.8	18.2
First Call Earnings Revision*	-4.77%	-2.28%	-1.65%

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 200-day average	1080.1	1076.0	Positive
Stocks above 200-day average	34.0%	30.0%	Positive
Options: Put/call ratio	0.53	0.54	Negative
Insiders: Vickers Sell/buy ratio	0.45	0.46	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Communications Equip.	37.7	66.5
Homebuilding	36.1	64.9
Hotels & Motels	35.4	64.0
Machine Tools	35.0	61.8
Computer Systems	31.3	55.0

WORST-PERFORMING GROUPS

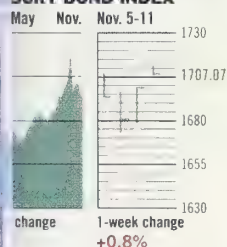
	Last month %	Last 12 months %
International Oil	-3.5	-62.1
Gold Mining	-3.3	-39.9
Electric Companies	-3.2	-32.9
Photography/Imaging	-3.0	-32.0
Domestic Oil	-2.8	-31.1

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Exxon	70 1/8	-1 1/16
DuPont	59 1/4	-1 1/16
Eastman Kodak	78 9/16	-5
Apple Computer	35 1/8	-2 7/16
American Home Products	49 1/16	-1 5/16
Chevron	80 1/2	-4 9/16
Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Dell Computer	70 5/16	14 1/4
Cisco Systems	67	14 5/8
MCI WorldCom	55 9/16	8 1/4
Biogen	77 1/8	8 7/8
eBay	130 7/8	99 3/8
Ciena	17 13/16	9 1/4

BOND RATES

SURVEY BOND INDEX



Data: Bloomberg Financial Markets

KEY RATES

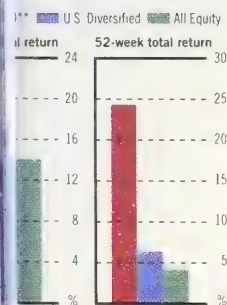
	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	4.84	4.89	5.15
90-DAY TREASURY BILLS	4.55	4.55	5.30
6-MONTH BANK CDS	4.46	4.45	5.19
1-YEAR TREASURY BILLS	4.53	4.47	5.43
10-YEAR TREASURY NOTES	4.82	4.88	5.89
30-YEAR TREASURY BONDS	5.29	5.33	6.13
LONG-TERM AA INDUSTRIALS	6.34	6.45	6.71
LONG-TERM BBB INDUSTRIALS	7.30	7.32	7.08
LONG-TERM AA TELEPHONES	6.64	6.79	6.97

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	30-yr. bond Latest week	10-yr. bond Last week	30-yr. bond Last week
GENERAL OBLIGATIONS	4.17%	4.15%	4.87%	4.85%
PERCENT OF TREASURIES	86.49	84.98	92.12	91.08
TAXABLE EQUIVALENT	6.04	6.01	7.06	7.03
INSURED REVENUE BONDS	4.28	4.26	5.10	5.08
PERCENT OF TREASURIES	88.77	87.23	96.47	95.40
TAXABLE EQUIVALENT	6.20	6.17	7.39	7.36

MUTUAL FUNDS



Data: Morningstar, Inc.

EQUITY FUNDS

Leaders	4-week total return	%	Laggards	4-week total return	%
Frontier Equity	56.3		ProFunds UltraShort OTC Inv.	-34.4	
ProFunds UltraOTC Investor	46.3		Prudent Bear	-26.0	
Federated Aggress. Grth. A	42.8		ProFunds UltraBear Serv.	-22.3	
Firsthand Tech. Value	42.6		Potomac OTC/Short	-18.6	
Munder NetNet A	42.6		Comstock Part. Cap. Val. B	-16.4	
Leaders	52-week total return	%	Laggards	52-week total return	%
Flag Investors Commun. A	54.7		Lexington Troika Russia	-84.8	
Transamerica Aggr. Gr. Inv.	54.5		American Heritage	-54.6	
Smith Barney Telecomm. Inc.	50.9		Eaton Vance Wwd. Dv. Res. B	-52.3	
Dreyfus Technology Growth	49.7		Dreyfus Aggressive Growth	-51.5	
Rydex OTC Investor	47.6		Frontier Equity	-49.4	

EQUITY FUND CATEGORIES

Leaders	4-week total return	%	Laggards	4-week total return	%
Technology	28.1		Precious Metals	-0.4	
Small-cap Growth	26.0		International Hybrid	3.9	
Small-cap Blend	24.2		Utilities	5.5	
Communications	21.7		Japan	7.0	
Mid-cap Growth	21.7		Natural Resources	7.6	
Leaders	52-week total return	%	Laggards	52-week total return	%
Communications	25.3		Diversified Emerging Mkts.	-29.7	
Utilities	23.0		Latin America	-27.1	
Large-cap Growth	20.6		Natural Resources	-26.5	
Large-cap Blend	16.5		Pacific/Asia ex-Japan	-24.3	
Technology	13.2		Diversified Pacific/Asia	-19.3	

as of market close Wednesday, Nov. 11, 1998, unless otherwise indicated. Industry data S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money

flow analysis, and mutual fund returns are as of Nov. 10. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

OUT OF TOUCH WITH REALITY

The world appears increasingly unfathomable. The number of political surprises and economic shocks is astonishing. It's hard to make sense of events, even harder to safely predict the future. How can we explain the enigma of these times?

The growing split between pols and people explains part of the confusion. The unexpected Democratic triumph in the recent elections was due, in part, to Washington's obsession with impeachment while the public was more interested in education, health care, and Social Security. Proposals for radical religious, social, and economic initiatives went unheeded by voters who preferred more moderate solutions. Polls showing the public's distaste for impeachment and a clear preference for safeguarding Social Security over radical tax cuts were available months before the election. They were ignored. No wonder subsequent events proved surprising to Beltway insiders.

The economy is providing similar surprises. Many in Washington opposed raising taxes on the top brackets in 1994 because they believed it would cause a recession. Instead, interest rates came down as the budget deficit fell. This triggered a middle-class spending spree and a capital investment boom that led to record corporate profits. No wonder many were astounded when the stock market took off for a three year run.

Many in Washington opposed a minimum-wage hike because economic theory suggested it would hurt the employment of low-wage workers. But when it was raised, the unemploy-

ment rate actually fell. Surprise. A 20-year era of labor shortage had been replaced by one of shortage in towns and across the country. Businesspeople had been talking shortages for months, but few in Washington were listening.

Beltway insiders were totally shocked when a run-currency crisis in tiny Thailand turned into a depression for Asia. What happened? Economists from the International Monetary Fund and the U.S. Treasury prescribed standard policies that turned out to be unsuited to local realities. Surprised by the devastation that followed, the economists blamed "rot" in Korea, Thailand, and Indonesia. They pleaded ignorance of the local situations in the region.

The real world appears to be changing faster than the comprehension of it. People who grew up in a cold war world of high defense spending, inflation, low growth, and high unemployment can easily misperceive a U.S. economy that is integrated globally, has no pricing power, and sustains growth and low unemployment. Each quarter of 3% growth and little inflation surprises them. They dismiss real chief executives who say that high technology is raising productivity. So they are amazed when, even this late in the business cycle, productivity is up 2.3% for the third quarter.

Many leaders are simply out of touch. They are divorced from the people they lead and misunderstand the economic and political forces that will dominate the opening of the next century. For them, this should be a time for listening and learning. Otherwise, they're toast.

PLAYING THE EARNINGS GAME

If corporate profits are so weak, why are stock prices so high? Good question. A BUSINESS WEEK survey of 900 companies shows that third-quarter profits declined by an average of 4% from a year earlier, the worst showing since the recession of 1991. Yet the Dow Jones industrial average is up nearly 1000 points in a month and is close to 9000. Sure, the Fed has cut rates twice, and there's plenty of liquidity sloshing around. But aren't real profits supposed to support lofty prices?

Well, no; not really. These days, Wall Street is gaming the quarterly-profits announcement cycle. Beating estimated earnings, not real profits, is the driving force in the market. Corporate "IR" (investor-relations) specialists work through analysts to manage expectations of upcoming earnings. Lower those estimates and then beat them by 10% or so, and bingo! Your stock goes up. Do it quarter after quarter, and you get a rep for delivering to shareholders—even if your stock price is not keeping up with the Standard & Poor's 500-stock index or your industry group.

Thanks to the IR people and analysts, in recent years earnings estimates for the S&P 500 in any quarter tend to start out an average 5% to 8% higher than where the earn-

ings end up. The Street knows this and allows for analysts to whittle down the numbers as the quarter proceeds.

Corporate IR folks then begin talking to the analysts to cover their company, lowering earnings estimates. They even invented something called "whisper numbers" that they pass on to analysts (not the investing public) just days before the release of the real profits statement. This strategy makes analysts eager participants in the game of managing earnings in order to beat them. In July, for example, analysts were forecasting a 10.2% average increase in operating earnings for the third quarter, according to First Call Corp. High expectations. By Oct. 12, the start of the reporting season, analysts had lowered expectations to -3.2%. When the real numbers started coming in, they were 1% above the revised, severely lowered, expectations. Since companies are beating final estimates, many stock prices are up.

This gaming of earnings estimates is a way to put up stock prices even when the fundamentals for earnings growth are weakening. In the long run, it will antagonize investors. Increasingly, analysts are not to be believed on Wall Street. Soon, the companies themselves won't be either.



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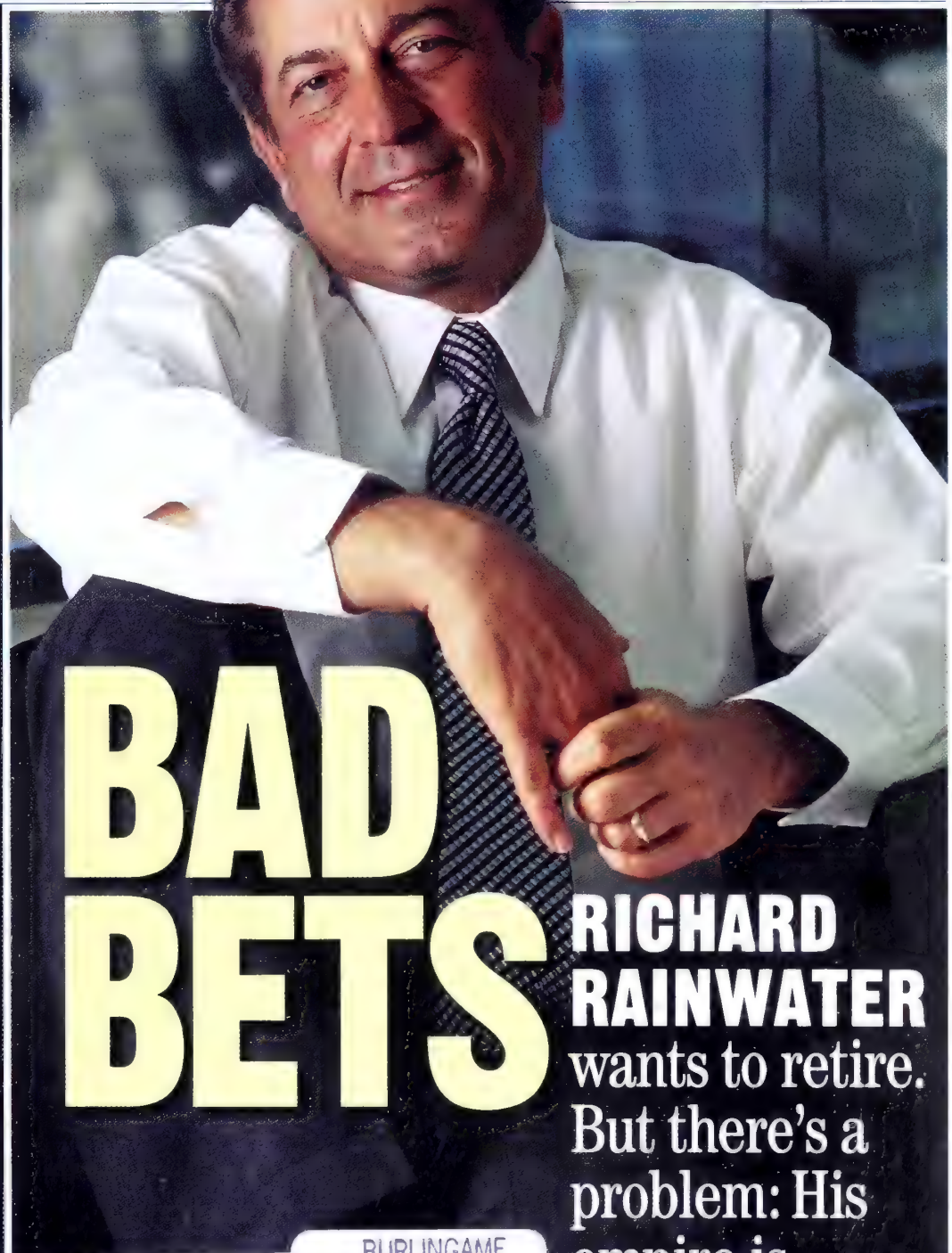
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Bill Gates
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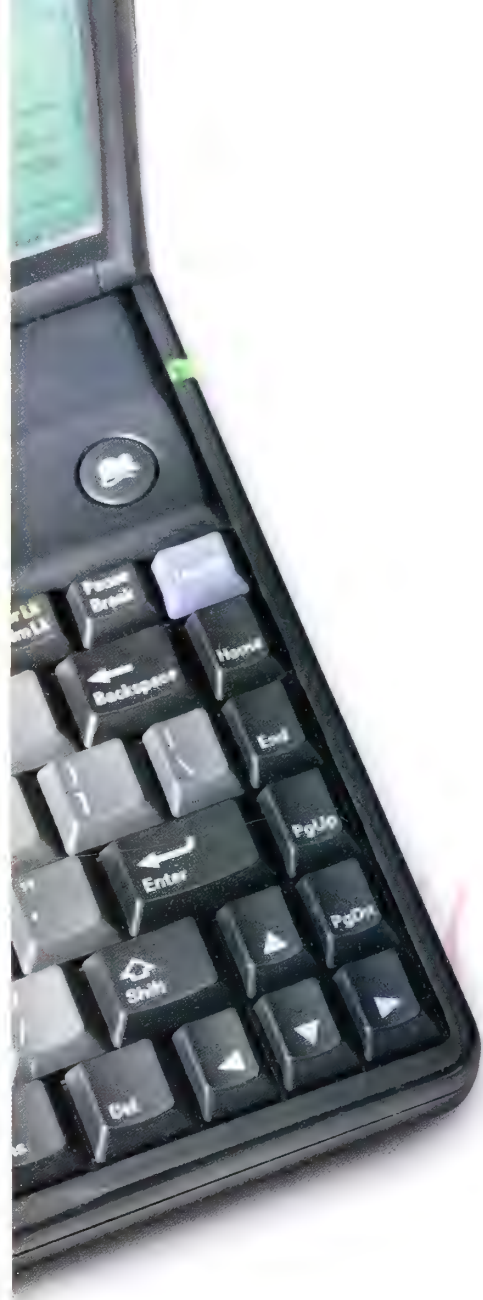
BAD BETS

RICHARD RAINWATER
wants to retire.
But there's a
problem: His
empire is
in a mess.

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With his holdings in real estate, health care, and energy headed downriver, can the rainmaker reverse the tide?

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Billionaire dealmaker Richard Rainwater wants to focus on golf and good works. But his \$1.8 billion empire, battered by forays into Vegas gambling and psychiatric health care, has lost 35% in value since January. With his status as a rainmaker at stake, Rainwater is spending more time on damage control

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Up Front

EDITED BY JOAN OLECK

HEDGE FUNDS

'WE'RE REGULATED. WHY AREN'T THEY?'

GOLDMAN SACHS CO-CHAIRMAN Jon Corzine has seen enough. His firm stood to take a hit from the market turmoil had Long-Term Capital Management, the leveraged hedge fund, gone bust. Goldman even ponied up big bucks to rescue LTCM. Now, Corzine wants regulation of the funds, which so far have been caveat emptor.

During a Nov. 16 speech at a business summit, Corzine endorsed "greater transparency and official reporting, if not regulatory requirements, for

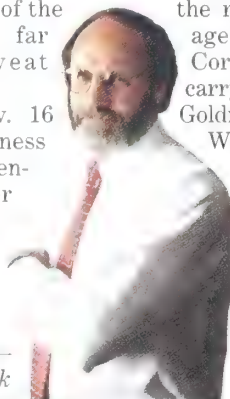
hedge funds." Added a Goldman executive in an interview: "If [a hedge fund] has borrowed \$1 trillion, we should know about it. We're regulated. Why aren't they?"

The question now is the impact of Corzine's remarks. Already, a Clinton Administration official at the APEC forum has described "broad support for us to address sensible ways to look at the risks of highly leveraged institutions." And Corzine's opinion should carry some weight, since Goldman is now one of 16

Wall St. firms that together own 90% of LTCM; Goldman alone put up \$300 million for the rescue. All told, looks as if hedge funds' freewheeling days are numbered.

Mark Clifford

CORZINE: *Less risk*



MAD AVE

THE BIPARTISAN BICARBONATE

LOOKING TO PUT A LITTLE fizz back into its image, Alka-Seltzer, the pop-pop pain reliever, has turned to two veterans of the political

product's image from what brand manager Gus Braun describes as "the category of overindulgence and hangovers—a fun, whimsical medicine." The new campaign, featuring Carville and Matalin gabbing in front of the U.S. Capitol, sends a different message: Alka-Seltzer is "a serious, powerful medicine."

Image mavens see the quarreling pundits as ideal models for their target audience: people with stressed-out lives, who overindulge and eat on the run. In the new ad from BBDO/New York, set to appear on Nov. 25, Carville declares: "There's more heartburn than ever." To which Matalin quickly retorts: "And more Republicans." Spin alert! Perhaps the line was scripted pre-Nov. 3. Republicans actually lost seats in Congress. *Richard Dunham*



MATALIN AND CARVILLE: *Pitching*

wars: James Carville, Democratic mastermind of Clinton's political rise, and Mary Matalin, his Republican activist wife. But they have some spin control to do.

Bayer, maker of Alka-Seltzer, wants to change its

TALK SHOW "Financial conditions can reasonably be expected to be consistent with fostering sustained economic expansion while keeping inflationary pressures subdued."

—The Fed's hint: Don't expect further rate cuts anytime soon

I-WAY PATROL

BANDWIDTH WOES: WHAT A DRAG

A BUMP HAS SHOWN up on the road to Internet nirvana: Cable-TV companies may have overpromised the potential for Net access

via "cable modems." Witness @Home Network, which, federal filings show, has imposed a 10-minute limit on the TV-quality movie clips its customers can download off the Net. What gives? The lack of bandwidth.

While @Home delivers data 100 times faster than standard modems, most cable companies devote only a tiny slice of their cable to Net access. And unlike

phone-line modems, @Home uses a shared network. So just a few of your neighbors downloading a high-resolution file at one time clog @Home's work. "Video-on-demand" quality... where nearby... five y

@Home concedes.

True, cable modems are still scarce. But penetration is pegged to jump 6% in two years, and more bandwidth-hogging applications are coming. No wonder Oyster of rival HSA complains about @Home's big price. "At the very least," says, "everyone should follow the rules before they're on the road." Including limits. *Peter B.*



TRADE WINDS

CHINA'S ARMY: *Steering*

MAKING SENSE OF SANCTIONS

THINKING ABOUT INVESTING in Burma's gas fields? Forget it. Lending money to Libya? Not on your life. Such advice comes from www.sanctions.net, a new Web site from Washington consultants James Orr Associates.

Congress, state legislatures, county supervisors, and even city councils have targeted so many countries for trade sanctions—50 at last count—that it's hard to keep track. U.S. exporters and investors are often confused. Help from the State Dept.? No way. "There's just no single government

clearinghouse for info on sanctions," says Mackintosh of James

Mackintosh calls for a site a response to the time being spent on the sue—which has involved major trading partners Canada and Italy. The Congress, meanwhile, is able to make the process rational. A reform bill in committee.

And more sanctions imposed for various religious persecution the free Web site changes to a \$699 subscription service soon. Men take this free advice: buy goods made by Chinese army. *Paul Ma*



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Up Front

ART OF THE DEAL

BE NICE—AND YOU'RE DEAD MEAT

THE NEXT TIME YOU HEAD for the bargaining table, leave that smile at home. And don't count on your I. Q. to help, either. A Vanderbilt



POWER BREAKFAST: Cagney "got it"

University Owen Graduate School of Management study delivers the curious news: Extroverted and agreeable negotiators do not fare well in bargaining. And smarts play only a minor role.

The study related the success of B-school students in a mock manufacturer-supplier

price negotiation to their personalities. The result? Bruce Barry, co-author with Raymond Friedman, says a cooperative, sociable personality is a liability in scenarios where one party wins at another's expense. Explains Barry: "'Agreeables' stand a much greater chance of being anchored." Translation? Affectable types let their tendency toward cooperation override their economic analysis. And intelligence had little influence on success in the win-lose portion of the study.

So what's a negotiator who's naturally agreeable to do? Don't despair, the management profs tell their students. By setting specific rather than abstract goals prior to negotiation, "agreeables" tracked by the Vanderbilt study caved in less to that demon temptation—cooperation. *Jeanette Brown*

PAY CHECK

WHAT GETS LOST IN THE GENDER GAP

WOMEN STILL MAKE 74¢ for every dollar a man makes—but you know that. What's new is a feature on the AFL-CIO Web site enabling Everywoman to calculate the actual sum she'll lose during her lifetime—and what that means in lost dinners out and vacations in Jamaica.

To do the math, log on to www.aflcio.org. The union's lively new Equal Pay section has brought the site half a million hits since its September launch. "This is a sleeper issue, and we're trying to wake it up," says Karen Nussbaum of the AFL-CIO's Working Woman Dept.

No wonder: That 26¢ adds up. To find out how much, a visitor enters her salary, age, and education, then links to a site computer. Sample: A 44-

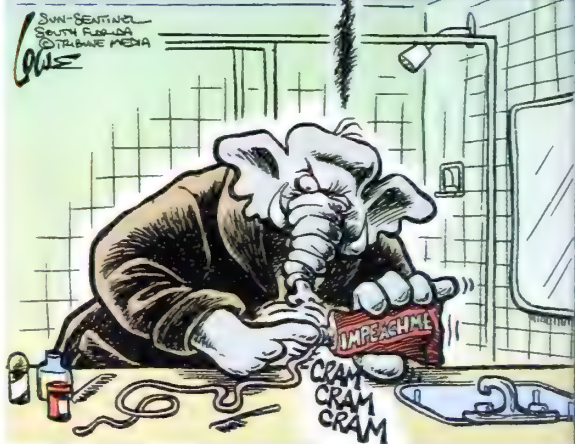
year-old with a year of college earning \$40,000 will lose \$1.06 million. That's 254 years of child care, 1.8 million servings of macaroni and cheese, or 806 weeks in Jamaica.

The feature evolved after a union survey of 50,000



working women revealed equal pay as their top concern. The "gender gap" results because "women's" jobs typically pay less than even equivalent "men's" jobs. Male stock clerks earn \$470 a week to female office clerks' \$361. So, guess who eats the most macaroni? *Aaron Bernstein*

DRAWN & QUARTERED



AMUSEMENTS

IT'S JUST A RIDE. IT'S JUST A RI-YEE!



'COASTING: Go on, relax

"COASTERPHOBICS," LISTEN up. Help for your fears is on the way. Islands of Adventure, a Universal Studios Escape theme park scheduled to open in Orlando next summer, is building two of the biggest, baddest rollercoasters imaginable. But Universal realizes that not everyone is a 'coaster fanatic. So it has called on

expert "fear queller" Newmark to lead a management program.

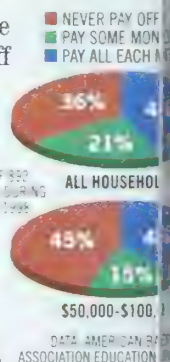
Newmark, a Harvard University-trained psychologist, will head to Orlando to help park attendants to soothe comfort coasterphobics about rehearsal," says Newmark, "looking at what's ahead." Coasterphobics will be escorted to a "calm room" to watch a video of the ride in progress and use simple breathing and relaxation techniques. Hopefully, they'll then be escorted back to their place in line.

"Universal is doing a good story," Newmark says. Perhaps the company recognizes the real fear and anxiety people have about lines and dentists, or listening? *Jeanette Brown*

THE BIG PICTURE

A NEW FINANCIAL HEALTH BAROMETER

Middle-income Americans are the worst at paying credit-card bills. More never pay balances than pay them off monthly. The message: Repayment patterns may be indicators of how households are doing financially.



FOOTNOTES Office workers who call themselves "neat freaks": 33%; "pilars": 27%; "filers": 23%; "pack rats": 12%; "slo-



What, exactly, is the best way to

share

a thought?

post it on your Intranet? Or do you say it on the Internet? Should you e-mail it? Or fax it? With so many ways to connect, you need the
a company that can help you unify them all – Nortel Networks™. A company whose solutions are at the heart of mission critical
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[illegible]

**IN NET ADVERTISING,
THE CUSTOMER IS STILL KING**

What is so fascinating about online marketing is not how the old rules don't apply, but rather how they are not applied even when they are appropriate ("Branding on the Net," Marketing, Nov. 9). Somewhere in the mad rush to advance the technology that drives the Internet, almost the entire industry has made the determination that the audience must be made to fit the technological model, when it should be the other way around.

This error has technology departments wasting time and money on “improving” banner ads and has marketing departments whining that their campaigns online have not met expectations. The most ridiculous assumption is that somehow, when a person sits down in front of a computer screen, thought processes become completely different from what they were before. Yet this is how most Internet marketing plans are determined.

I'm currently incorporating additional advertising models into my Web site that pay more attention to the desire of the audience than to the available technology. This has resulted in additional focus from the audience, better response online, and the flexibility to get more traditional responses (such as in-store traffic, phone calls, or participation in a promotion). This is based on an old marketing rule: Understand your audience, and the attention will follow. Even in the new, frantic Internet advertising industry, that's a rule well worth following.

Jim Brody
Mystic, Conn.

Ellen Neuborne and Robert D. Hof do a great job of highlighting the problems with Internet advertising, but they did not go into much detail on the impact that transactions have on branding. The successful Internet marketers mentioned in the piece—Yahoo!, AOL, and Amazon.com—all have one thing in common: Each is truly interactive. Customers

can get the information, or buy the product that they need, in real time.

Real interactivity is the answer that Internet marketers are seeking. And with new technologies, this banner ad will become more valuable, not less, as the authors write. The next-generation banner is more like a miniature blend of advertising and E-commerce. These new E-commerce sites expect to allow consumers to request more information, chat in real time with a customer-service representative, request a telephone callback, or simply purchase a product, all without leaving the original Web site they were browsing. It's exciting that some advertisers may not need expensive, hard-to-measure Web banners with ministores soon.

Tom B

9th St
Newport

What traditional companies not understand about building a business in cyberspace is simple: Put serving customers first, for real. The Net is the ultimate word-of-mouth vehicle. The fact that early adopters tried it, and told hundreds or thousands of their cyberfriends about it,

Amazon.com offers great prices, service, and a unique ability for customers to communicate with each other. What other company has encouraged customers to post comments about its products—positive or negative—in a prominent position? Is Procter & Gamble ready to let customers' unfavorable opinions about the latest soap be publicized for all to see? How about Chrysler opening up its minivan product-selection page for owners to post their likes and dislikes?

Those who haven't participated may be surprised how fair and accurate the information tends to be. Recently, while car-shopping, I posted requests for recommendations and warnings about car dealers in my area. The consistency of responses amazed me. When I

Business Week

McGraw Hill

NOVEMBER 30, 1998 (ISSN 0007-7135) *** 3606

PHOTOCOPY PERMISSION: Write to:

individuals write to praise dealer five others write to complain ealer Y, then the information be-
compelling.

f this scares the pants off tradi-
marketers. Companies that are
ted to quality, value, and service
othing to fear. Companies that
extend to be, watch out!

John T. Horner
Morgan Hill, Calif.

INT OF MODULAR PLANTS OUT DOWN ON PARTS

AM: Modular plants won't be a
The Workplace, Nov. 9), financial
Maryann Keller and Toyota Mo-
p. spokesman Koki Konishi miss
antage of the modular concept:
tional car plants have to cope
too many components, typically
ss of 10,000. At the same time,
uppliers typically have too few
nd therefore lack "whole prod-
capabilities. Modularity offloads
suppliers, strengthening both

automotive plant with 10,000-
ts, more money must be invest-
onvalue-adding material handling
age, plus outsized materials de-
nts and computer systems for
ry management and logistics,
the value-adding processes
ves. To be efficient, a plant
have no more than a few hun-
rts, which the modular concept
s. More than that is a manage-
ghtmare.

supplier that just stamps metal
nolds instrument panels is in an
position, easily replaced by a
or molder in, say, an emerging
e country. When a supplier up-
o become a first-tier supplier of
odules—stampings that are also
drilled, and loaded with pretest-
g, or moldings that are stuffed
the electronic components of a
e instrument panel—genuine,
m mutually beneficial partner-
e possible. General Motors Corp.
sily botch the job, as pioneers of
the modular concept, however, is
rdue in an industry that to date
i hopelessly inefficient.

Richard J. Schonberger
Seattle

ABLED GO TO WORK— E LAW SUPPORTS THEM

primary author of the Ameri-
h Disabilities Act (ADA) and as a
with a disability, I take issue
ter Coy's "Dubious aid for the
" (Economic Trends, Nov. 9).
cle asserts that Census Bureau

survey data show a drop in employment
among individuals with disabilities. The
Massachusetts Institute of Technology
study giving rise to the article compares
different survey questions from one year
to the next—apples to oranges—pro-
ducing inaccurate findings.

In fact, the latest statistics from the
Census Bureau, released in 1996, show
that more than 1 million Americans with
disabilities entered the workforce during
the first years after the law was passed.
Even more encouraging was that 800,000

of those people have disabilities that are
severe.

Coy states that "the mandate for 'rea-
sonable accommodation' can require cost-
ly investment in such items as special el-
evators." He neglects to point out that
employers are not required to make
changes that would cause undue financial
hardship. Nor does he mention that tax
incentives exist to help many businesses
defray such expenses. The President's
Committee's Job Accommodation Net-
work reports that the mean cost of

WillTales



*With winter almost here, Ed should stop fiddling around and
call Williams about their Ten-Year/One-Price energy deal.*

This will be music to your ears. Williams can give you
the same fair energy price year after year after year.
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reliability for free. Bravo!

that **Williams** energy



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NESTLE WALT

We speak numbers fluently, but do you know in how many languages



French franc (FRF)

Dexia's outstanding loans in the financing of public service facilities stood at FRF 631 billion on 30 June 1998



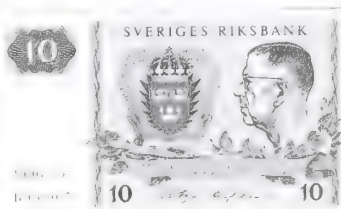
Australian dollar (AUD)

Dexia manages assets of AUD 205 million via AUSBIL Partners Ltd



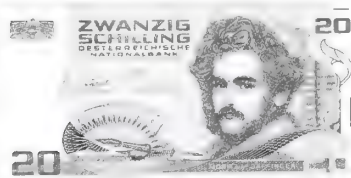
Dutch florin (NLG)

NV Bank Nederlandse Gemeenten, the Dutch municipal bank, was one of the founding shareholders in Dexia France



Swedish krona (SEK)

Only eighteen months after startup, Dexia's Swedish subsidiary, Dexia Kommunbank AB, has total outstanding loans of SEK 5,083 billion on 30 June 1998



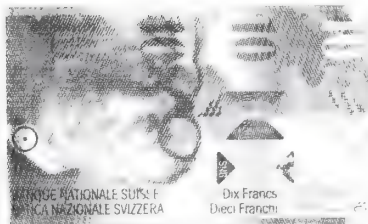
Austrian schilling (ATS)

Dexia has a 26% stake in Österreichische Kommunalkredit. The bank of Austrian local government posted ATS 5.33 billion in new operations on 30 June 1998



Deutsche Mark (DEM)

Since the beginning of 1998, Dexia Hypothekenbank Berlin AG has issued a volume of DEM 5.5 billion on the Jumbo Pfandbriefe market. These issues have been given an AAA rating



Swiss franc (CHF)

Experta-BIL, banking company and Dexia's Swiss fiduciary, managed assets of CHF 4.087 billion on 30 June 1998



Luxembourg franc (LUF)

Dexia managed some LUF 885.3 billion in assets on 30 June 1998. These activities have been reassigned to the group's new specialised subsidiary, Dexia Asset Management (Dexiam)



Pound sterling (GBP)

Dexia has two outlets in the UK. BIL London focuses on asset management. Dexia Municipal Bank (GBP 1.076 billion in assets on 30 June 1998) is active in the social housing and major



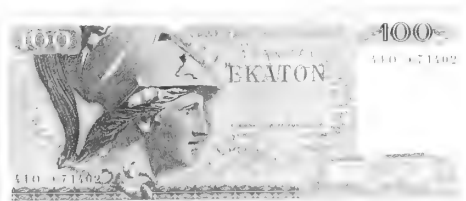
Italian lira (ITL)
 Dexia's 100% stake in Crediop, the leading public service facilities in Italy, represented 25% of the open public sector on 30 June 1998



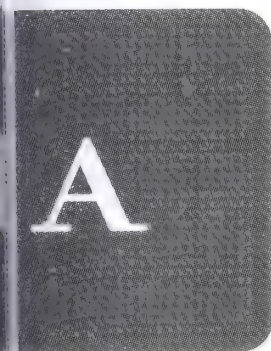
Portuguese escudo (PTE)
 Dexia supplied the equivalent of PTE 1 004 billion towards the financing of the Tagus bridge



Belgian franc (BEF)
 Dexia's total outstanding deposits, all customer categories, came to BEF 2,896 billion on 30 June 1998



Greek dracma (GRD)
 As part of a partnership agreement signed in early 1997, Dexia has been acting as advisor to the Greek national savings and deposits bank, in the areas of risk analysis, lending and resources policy



ancing of public service
 a shareholders' equity of
 dexia is currently expanding
 e and asset management.



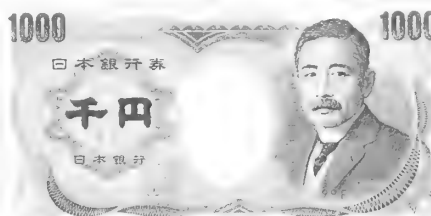
Peseta (ESP)
 As part of the alliance signed in June 1998 with the group Argentaria, Dexia has acquired a 40% stake in Banco de Credito Local, the leading banker of Spanish local authorities.



Euro (EUR)
 On 15 September 1998, the market capitalisation of the group totalled 9.5 billion euros



Canadian dollar (CAD)
 Dexia is providing financing for Canadian provinces and major cities as part of its North American expansion. Outstanding loans stood at CAD 656 million on 30 June 1998



Yen (JPY)
 Credit local de France's total outstanding bond issues (before swap) in yen stood at JPY 409.4 billion



US dollar (USD)
 Total outstanding commitments generated by the New York branch in public finance and project finance came to USD 3.914 billion on 30 June 1998.



Crédit Communal

CORRECTIONS & CLARIFICATIONS

"Can SmithKline keep flying solo?" (Management, Nov. 9, in some editions) should have stated that Warner-Lambert Co.'s diabetes drug Rezulin has been associated with 21 deaths worldwide since its launch, not 21 deaths in the U.S.

In "Tops with the shortbusters" (Inside Wall Street, Nov. 23), the figures for the 52-week high for Organogenesis and Hemispherx BioPharma were incorrectly printed. The figures should read ORG 37 $\frac{1}{2}$ % and HEB 13 $\frac{1}{2}$ %.

My employer, ADA, is \$200. During the eight years since ADA was enacted, I have not heard of a single business that closed as a result.

Finally, Coy voices employers' fears that workers with disabilities might sue them over wages or dismissal. The American Bar Assn. recently disclosed that 90% of lawsuits brought under ADA are won by employers. Like all civil-rights legislation, ADA has been tested by frivolous claims. The courts have found that the remaining 10% of discrimination charges are legitimate, giving all Americans—those of us with disabilities and those who may acquire disabilities in the future—assurance that our rights are protected.

Tony Coelho
Chairman

President's Committee on Employment of People with Disabilities
Washington

UNDERSTANDING ANWAR AND HIS QUEST FOR JUSTICE

Anwar Ibrahim, Malaysia's sacked Deputy Prime Minister, forgot an elementary precept of governance ("How a blood feud in Malaysia spun out of control," International Business, Nov. 9). Prime Minister Mahathir Mohamad was elected by his party and by the citizens, and Mahathir, in turn, appointed Anwar.

If the No. 2 profoundly disagrees with his superior, he should do the honorable thing—resign. Anwar was given every opportunity to do just that. No chief executive would become a subordinate with a conflicting agenda. In the few months preceding Anwar's firing, Mahathir expressed none too subtly his disdain and contempt for his deputy. Anwar should have quit then and openly challenged Mahathir's authority. The convention is less than a year away.

I am continually bemused at the West's fascination with and admiration of

Anwar. While he spouts free-market and liberal theology here, back home among his Muslim followers, his messages are radically different. There, Anwar's vision of Islam is of the Iranian variety. During his brief tenure as acting Prime Minister in 1997, he tried to force non-Muslim students to take courses in Islam. His wife (a Western-trained doctor) and daughters are never seen without their orthodox Muslim headgear.

As Finance Minister, Anwar awarded plum projects to his cronies and family. His father, a former hospital orderly, ended up with millions worth of shares and lucrative hospital contracts. So much for Anwar's abhorrence of cronyism and corruption. Americans should know the man better before embracing him.

M. Bakri Musa
Morgan Hill, Calif.

ASSESSING FACTORIES WITH WORKPLACE VIOLATIONS

In "A floor under foreign factories?" (The Workplace, Nov. 2), Aaron Bernstein writes: "If their factories don't pass muster or are certified but critics find violations anyway," companies may "become bigger targets." In contrast, the SASO00 program, overseen by the Council on Economic Priorities Accreditation Agency, builds in an appeals system designed to address noncompliance at certified factories. A worker, union, or any other interested party who presents evidence to appeal an SASO00 certification triggers an objective investigation. If the alleged violation is corroborated, factory management must implement corrective action to retain SASO00 certified status.

This appeals process should accomplish three objectives: 1. Bring about real improvements in workplace conditions; 2. Maintain public confidence in certification, lessening the likelihood a company will be publicly attacked for lack of effective response; and 3. Provide a reliable independent mechanism to determine if charges are well-based.

Alice Tepper Marlin
President
Council on Economic Priorities
New York

THAI AIRWAYS' ACCIDENT RECORD

Thai Airways International Ltd. has had only one fatal accident in the past 30 years: at Kathmandu in 1992 ("U.S. airlines: Make sure your partners are safe," Government, Oct. 19).

Thai Airways International should not

be confused with Thai Airway Co., a separate entity that ceased operations after a merger between the two companies in 1988. The international carrier took over the route and staff of the former domestic carrier.

The report prepared by AirSafe Financial Consultants, on which you rely was based, recently came to our attention. We hope you will understand that the data used by AirSafe misrepresent Thai Airways International as damaging to our reputation. Total accidents that occurred prior to related to the domestic carrier TAIC, because Thai International was a separate company; it cannot be held responsible for their accident record.

Sunathee Isvaraphon
Director, Public Relations
Thai Airways International
Bangkok

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LOR OF TRUTH

George Bundy and William Bundy: Brothers in Arms

Bird

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ARCHING AMERICA TO A QUAGMIRE

Three years ago, I watched as Robert S. McNamara stood before a crowd at the Council on Foreign Relations in New York to discuss his new book, *In Retrospect: The Experience and Lessons of Vietnam*. In 1962 and 1963, that the war was unwinnable—yet they remained in power for nearly a decade to prosecute it. The men who had killed for their country in Vietnam, the former Secretary of Defense admitted with icy calm, had made a mistake. The probability had been right all along. The theory was ridiculous. Nationalism had been confused with communism. There had never been a serious threat to U.S. security.

McNamara did not apologize. Pentagon policymakers just didn't know the facts, he said. There were no alternatives around Kennedy and Johnson. They knew about Russia and Europe. They knew nothing about Asia. The pressure fell over the room. Middle-aged men in uniform, faced with the ugly truth of their actions in Vietnam, slowly shook their heads. After a few moments, a lone woman rose from the crowd and, in a voice choking with emotion, asked: "Why didn't you listen to the people in the streets, or the people who had decades of experience in China, or the dozens of Asian students on campuses?"

McNamara smiled down from the stage and said: "But they weren't in the room."

The Color of Truth by Kai Bird is a book about two who were in that circle—National Security Adviser McGeorge Bundy and his brother William P. Bundy, a high-ranking official in the Defense Dept. They were anticommunist cold warriors who served in both the Kennedy and Johnson administrations, at the center of decision-making that brought the United States to Vietnam and kept it there. McNamara, they believed in in-

ternationalism, interventionism, and liberal idealism. Unlike McNamara, however, they knew from the beginning, in 1962 and 1963, that the war was unwinnable—yet they remained in power for nearly a decade to prosecute it.

This compelling book tells how two extremely clever men—both well-bred, well-schooled, and well-intentioned—came to put loyalty to relationships over commitment to the nation's well-being. In tale after tale, it shows how deference to Presidential authority came to outweigh obligation to the soldiers in the field.

Bird tells the beginning of the story well: the fateful decision in the summer of 1963 to encourage the assassination of Ngo Dinh Diem, a move that paved the way for the introduction of hundreds of thousands of U.S. troops. Bird describes the National Security Council meeting on Aug. 31, where all but one at the table agreed on the decision. The lone dissenter

was Paul Kattenburg, who had spent the 1950s in Vietnam as a Foreign Service officer. Just back from Saigon, he saw that the South Vietnamese were tired of the war and wanted an end to it. Diem was secretly negotiating with the North.

President Kennedy's chairman of the Joint Chiefs of Staff, General Maxwell D. Taylor, challenged Kattenburg openly. Secretary of State Dean Rusk called his comments "speculative." McGeorge Bundy, the national security adviser, sat silent. Years later, Kattenburg recalled that "there was not a single person there that knew what he was talking about."

Kattenburg was wrong. Bundy did know. In a masterful bit of reporting, Bird shows how Bundy had just weeks before sent his close friend, Michael V.

Forrestal, to Vietnam. Unlike previous envoys, Forrestal listened to lower-ranking troops and to journalists such as Neil Sheehan of United Press International and David Halberstam of *The New York Times*. He reported back to Bundy that only major political reform could save the day, and that such reform was practically impossible. So Bundy knew what Kattenburg was saying—but he kept his own counsel, as he did throughout the entire war.

Bird does an impressive job of taking the reader behind the scenes throughout the Vietnam War years. But I found his early chapters on the upbringing of the Bundy boys the most telling. They explain the brothers' absolute confidence in the abilities of men like themselves—self-assured graduates of Groton and Exeter, of Yale, Princeton, and Harvard.

Bird shows how, at an early age, they attached themselves to older, powerful men—men such as former Secretary of State Henry L. Stimson and Supreme Court Justice Felix Frankfurter, brought to the dinner table by their father, who had himself served in the Cabinets of Herbert Hoover and Franklin Roosevelt. Ideas were fiercely debated over dinner, but the key lesson learned was that relationships determined one's destiny. That led William and McGeorge to actively support their colleagues in the Cabinet and their President in prosecuting the war, despite private doubts.

McGeorge Bundy, of course, went on to head the Ford Foundation and promote liberal policies for many years after Vietnam, in much the same way as McNamara did at the World Bank. It was their reward for a job poorly done. Along with Halberstam's *The Best and the Brightest* and *The Wise Men* by Walter Isaacson and Evan Thomas, Kai Bird's *The Color of Truth* forms a trilogy that shows that America, in times of difficulty, finds "wise" men to lead it. But they often lack the courage of their convictions to do so properly.

BY BRUCE NUSSBAUM

Editorial page editor Nussbaum worked as a journalist and as a Peace Corps volunteer in Asia in the late '60s.

THE COLOR OF TRUTH



KAI BIRD
Author of THE CHAIRMAN: JOHN F. MCCLOY

THE BUNDYS' VIETNAM DECISIONS PUT LOYALTY AN INNER CIRCLE ABOVE NATIONAL INTEREST

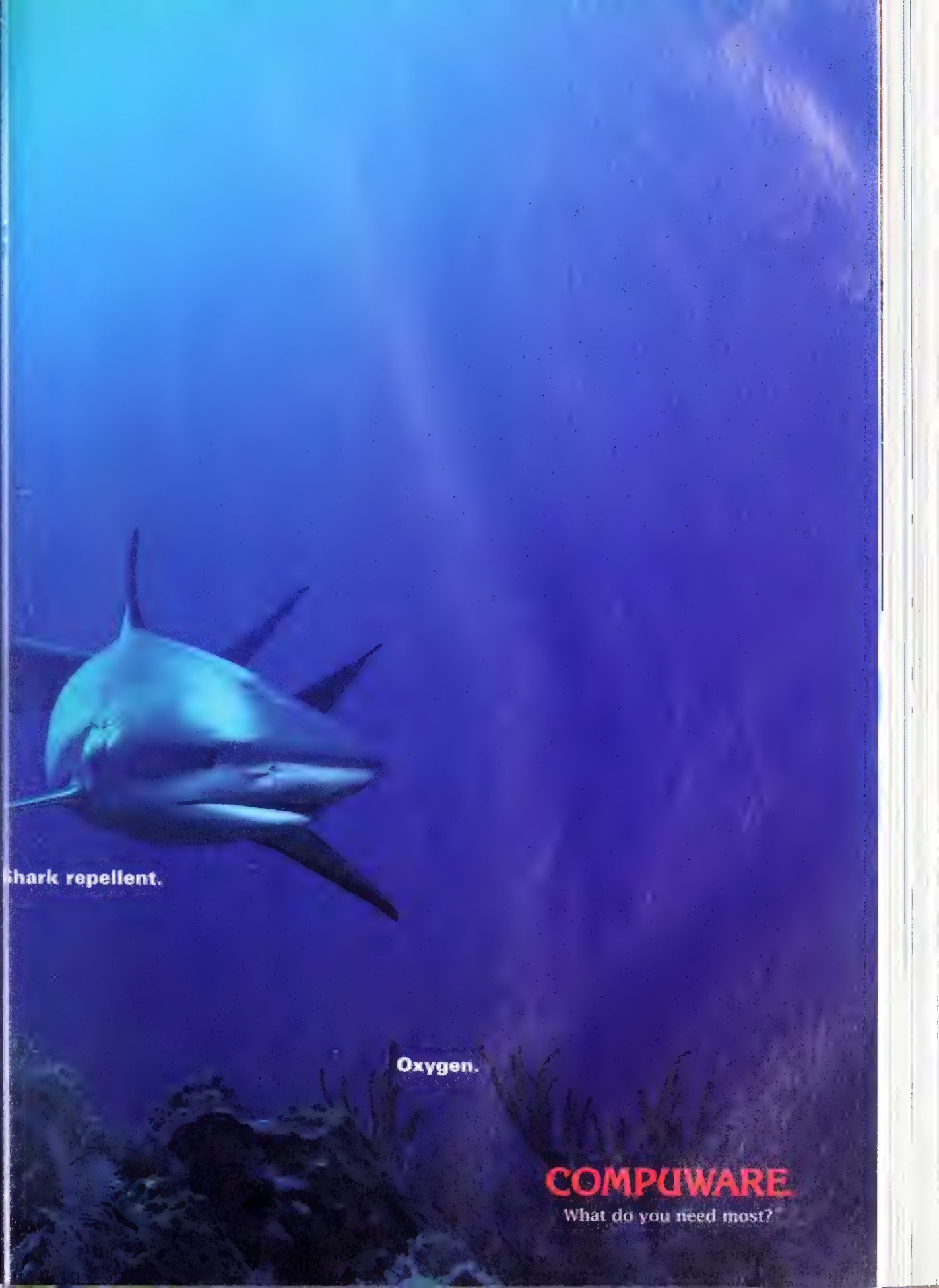
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- 10 **THE MOTLEY FOOL INVESTMENT GUIDE** by David and Gardner (Fireside • \$12) *The online duo puts it on paper.*
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- 15 **YOU'VE EARNED IT, DON'T LOSE IT** by Suze Orman with Linda Mead (Newmarket Press • \$15) *Financial planning—and mistakes to avoid.*

BUSINESS WEEK's Best-Seller List is based on a survey of chain and independent booksellers that carry a broad selection of books on economic management, sales and marketing, small business, investing, personal finance, and careers. Well over 1,000 retail outlets nationwide are represented. Current rankings are based on a weighted analysis of unit sales in October.

Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com (Click on BW Plus!)

HOT TYPE

WHAT GIVES WITH ALL THESE NUMBERS IN book titles? And are there precisely 48 "laws of power," as the No. 5 book on this month's BUSINESS WEEK Best-Seller list suggests?

In fact, *The 48 Laws of Power* seems to have been packaged more than published. Author Robert Greene, a playwright and student of the classics, spent two years compiling his aphorisms and narratives of life at court, then got together with book packager Joost Elffers to figure out a format. In the resulting book, one chapter is devoted to each "law"—such as No. 15: "Crush your enemy totally." Or No. 2: "Never put too much trust in friends. Learn how to use enemies." Running in red print in the margins alongside the text are quotes from

such worthies as Edgar Allen Poe, philosophers like Schopenhauer and Han-Fei-Tzu, and maxim makers like Rochefoucauld.

The book's amoral advice adds up to a grim portrait of a ruthless, duplicitous universe. "The more capricious you appear, the more respect you will garner," we learn in Chapter 17, titled "Keep Others in Suspended Terror." After a while, though, tales of Ivan the Terrible and Catherine the Great come merely tiresome. It's quite a contrast to another popular last year, that drew inspiration for workplace behavior from the lives of Jesus Christ and Moses. Who will provide the watchwords for workplace life in 1999? Stay tuned.

BY HARDY C.



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BY STEPHEN H. WILDSTROM

COFFEE, TEA, OR DVD?

Watching crisp, clear movies on your laptop can make that business flight fly by

When I walk the aisles of airplanes, I like to check out what my fellow travelers are doing on their laptop computers. As often as not, the activity seems to have very little to do with work: a game of solitaire or perhaps a round of virtual golf.

If solitaire is getting a little stale, you can take heart from the introduction of laptops equipped with digital videodisk drives (DVDs). With one of these, you can buy or rent movies on disk and be all set for an entertaining trip even if the in-flight movie is *The Mask of Zorro* or one of those made-for-airplane clunkers.

Two words of warning, though, before you get ex-

GATEWAY FIREANT: Big features from an ultralight box

cited about personal airborne movies. First, you'll have to carry at least one extra battery (which generally cost about \$100). Playing a DVD effectively disables a laptop's power-saving features while running the processor flat out, so you can forget about rated battery life. All three laptops that I tested ran out of battery

power a bit under two hours into *Apollo 13*, stopping way short of splashdown.

Second, if you are traveling internationally, don't plan to get movies for the return trip at your destination. As part of a copy-protection scheme, the industry has divided the world into six zones, and a player coded for one zone won't show disks from another. Moreover, the zones defy logic: A movie purchased in South America will work in Australia but not in the U.S. or Europe.

DVD players are showing up as an option in a variety of mostly higher-end laptops. I took a look at three, each of which is impressive in its own way: the Apple Power-



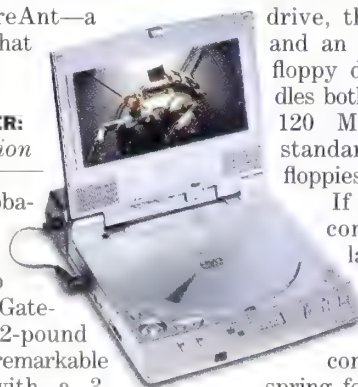
Book G3, the Gateway 3100XL FireAnt, and the WinBook XL.

The PowerBook is the class act of the field, though at 7.8 pounds, you're going to need a strong back. At

\$4,900, you'll also need a big wallet and a strong desire to watch movies. That money buys you a 300-MHz PowerPC processor, 64 Mb of RAM, and an add-on PC card to handle much of the work of decoding the DVD's MPEG-2 compressed video and audio. It adds up to a beautiful display on the PowerBook's 14.1-inch screen—and a laptop that is well-suited for heavy-duty graphics or video work.

The FireAnt—a code name that

PANASONIC PALMTHEATER: Cheaper option



stuck—is probably the most imaginative laptop to come out of Gateway. Its 5.2-pound weight is unremarkable compared with a 3-pound Sony Vaio 505. But it's just 11.2 inches wide, 8.4 inches deep, and 1.2 inches thick. And unlike ultralight notebooks, the FireAnt is a full-featured laptop: Pentium II processors up to 300 MHz, 64 Mb of RAM, a 4-Gb hard drive, and an internal DVD or CD-ROM drive. The 300-MHz DVD unit I tested costs \$3,199. The 12.1-inch display is no match for the much bigger PowerBook, but it is crisp and bright. Like the Apple laptop, the FireAnt uses a PC card to handle much of the video processing, so images are excellent even in the fastest action sequences.

The WinBook is the only notebook in this set to do all the video decoding on its 300-MHz Pentium II processor. The result: Images on the 14.1-inch display that aren't nearly as good as its rivals' (though they're still much better than those on the tiny monitors or distant screens generally found

on airplanes). The movie tends to be a bit jerky, especially in fast sequences. In addition, I found the on-board DVD controller from ATI Technologies Inc. considerably more convenient than the Apple's Gateway software.

Nonetheless, the WinBook is impressive on its own right. Although no lighter at 7 pounds, it's 1.5 inches thick and includes 128 Mb of RAM, a 6 Gb hard drive, the DVD controller, and an internal floppy disk that handles both high-capacity 120 Mb disks and standard 1.44 floppies.

If you can't find a company-owned laptop, you may find a little more to get from a laptop's built-in DVD controller. It's a spring for a DVD player. There currently are no real business applications for DVDs, and making empty flights more enjoyable is high on corporate-speak priority lists. If you just want to improve your in-flight entertainment prospects, you might consider the 3-pound, \$1,200 Panasonic PalmTheater portable DVD player. While its 5.2-inch screen is small, and text is as closing credits, it's hard to read, movie scenes are shown smoothly and clearly. Like the laptops, the PalmTheater includes a standard video output so that it can be used to show movie on a TV set as well. And its battery life exceeded the two hours, lasting through 140 minutes of *Apollo 13*.

Once DVD recording comes available, probably next year, companies will start developing business DVD applications, including training videos and databases. Now, though, the DVD may appear to be a bit of a lousy. Still, it sure can't last that long, boring flight faster.



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BY JEFFREY E. GARTEN

'CULTURAL IMPERIALISM' IS NO JOKE



LISTEN UP:
America should be more sensitive to fears abroad that U.S. exports of movies, music, software, and broadcasting are harmful

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

Washington's crusade for free trade is often seen abroad as a Trojan horse for companies, such as Walt Disney Co. and Cable News Network, that would dominate foreign lifestyles and values. Most Americans react to these fears with a shrug. That's a big mistake.

The entertainment industry, including movies, music, software, and broadcasting, is America's second-largest exporter after aircraft and has penetrated all global markets. Films such as *Lethal Weapon* are hits on every continent. *Reader's Digest* publishes in 19 languages. Windows computer programs and MTV can be found in remote corners of China.

The transmission of our culture goes beyond the arts or the media. When Washington exalts free enterprise, it promotes the notion that individual freedom has a higher value than government authority. When it advocates the rule of law overseas, it pushes a U.S.-style legal system.

REBELLION. From the Roman to the Soviet empires, superpowers have aimed to spread their cultures, and from Lorenzo de' Medici to Michael Eisner, there has always been a link between commerce and culture. Still, while America's lifestyle and ideas can be liberating and uplifting, they are also often destabilizing abroad. Movies and music frequently glorify violence and rebellion. Darwinian capitalism requires societies to uproot traditional structures without adequate regulation, safety nets, or education. The U.S. legal system encourages confrontation, not conciliation.

Americans should not have difficulty empathizing with foreign fears of cultural invasion. Recall U.S. anxieties a decade ago when Sony Corp. bought Columbia Pictures and Mitsubishi Corp. purchased New York's Rockefeller Center. Now reaction against American "cultural imperialism" is building. Just a few years ago, France almost torpedoed the Uruguay Round of global trade negotiations because it wanted to limit the activities of U.S. entertainment companies. Last spring, a multilateral treaty on investment rules was derailed in part because of a spat between Brussels and Washington over protection of Europe's cultural industries. In August, Canada called together 19 other governments to plot ways to ensure their cultural independence from America. Mexico is considering legislation requiring that a certain percentage

of its media programming remain in the hands of its citizens. U.N.-sponsored conferences on preserving national cultures are proliferating. In contrast to the American preference for financial liberalization, capital controls are becoming respectable in Asia.

The U.S. should do more than heed these warnings; it should recognize that strong national cultures abroad are in America's self-interest. Amid the disorientation that comes with globalization, countries need cohesive national communities grounded in history and tradition. Only with these in place can they make the tough decisions necessary to build modern societies. If societies feel under assault, insecurities will be magnified, leading to policy paralysis, strident nationalism, and xenophobia.

With satellites and the Internet, the spread of American culture cannot be stopped. It should not. But Corporate America and Washington could lessen U.S. dominance by encouraging cultural diversity around the globe.

Companies such as Time Warner Inc. and PepsiCo Inc. could fund native entrepreneurs wishing to create local cultural industries. They could showcase regional film and theatrical productions and finance university research and teaching in the region's history, art, and literature.

The Clinton Administration could reevaluate current trade policy and permit temporary quotas and subsidies abroad to preserve certain local cultural industries, such as film and TV. It could encourage the World Bank to build up foreign countries' tourism infrastructure. It could expand assistance to efforts to restore national monuments that have been neglected or destroyed.

At a time when so many nations that have recently embraced Adam Smith are in recession, the Treasury and State Departments could lower the volume on their rhetoric about the magic of the free marketplace. And when much of U.S. society is fed up with international litigation, officials could be more modest about the glories of America's legal system.

Protecting national cultures could soon become a defensive rallying point for societies buffeted by globalization and undergoing multifold change. Being more sensitive to foreign concerns would ease the prospect of backlash and even bolster America's ability to export its ideas and ideals for the long term. The U.S. should at least try.

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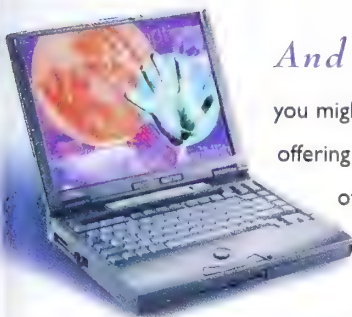
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BY GENE KORETZ

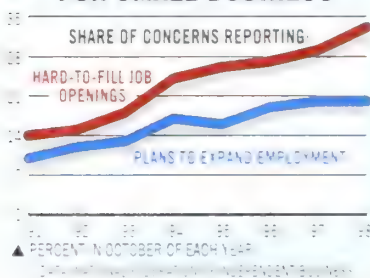
SMALL BUSINESS KEEPS ON ROLLIN'

Worries grow, but so do profits

Although the stock market has recovered and credit markets are on the mend, many large U.S. companies—particularly manufacturers—are feeling the pain of falling exports and sagging profits. So it's hardly surprising that planned layoffs by major corporations are soaring and that a recent Conference Board survey of chief executive officers found that their confidence has plummeted to a seven-year low.

Not so the nation's small businesses, which employ half of private-sector workers and account for the lion's share of job growth. According to the National Federation of Independent Business, its index of small-business optimism in October came in at 100—below its av-

STILL A HOT JOB MARKET FOR SMALL BUSINESS



erage level earlier in the year, but still relatively high.

"While firms say they expect the economy to weaken over the next six months, components of the optimism index reflecting current business activity remain quite strong," says NFIB economist William C. Dunkelberg.

Perhaps the strongest are those related to the labor market. A record 33% of NFIB members said they had "hard-to-fill" job openings in October, for example, and a record 21% indicated that finding qualified workers was their biggest problem. Moreover, some 20% plan to add workers in the months ahead, compared with just 8% that are planning layoffs.

Even in the face of labor shortages, productivity appears to be on the upswing. Despite slowing sales gains, rising labor costs, and a historically low level of price increases for their prod-

ucts, small businesses in October still turned in one of their best profit performances of the year.

Meanwhile, on the investment side, plans to add to inventories rebounded in October after a sharp decline in September. And capital-spending plans accelerated, as well. As for borrowing needs, small businesses continue to report little difficulty in obtaining funds. "Credit availability is as good as it has ever been, and rates have been falling," observes Dunkelberg.

Thus, small-business activity continues to hum, even as worries about the future grow. If you look at profits and at hiring and investment plans, "it's clear that the anticipated slowdown still hasn't materialized," Dunkelberg says.

SUICIDE: WHO IS MOST AT RISK?

The downtrodden—and white men

You might think suicide was highly correlated with socioeconomic status, and in the U.S. that's certainly true within racial and ethnic groups. Taking blacks, whites, Asians, and Hispanics separately, those in each group with the most education and highest incomes are least prone to suicide, while those at the bottom of the ladder have the highest rates. But as the chart shows, cultural factors also appear to play a major role.

Although non-Hispanic whites earn more money than either blacks or Hispanics, for example, their male suicide rate is about 75% higher. Similarly, non-Hispanic white females are more than twice as likely to take their own lives as black or Hispanic women.

Complicating the picture is the pattern among Asians, whose median income is higher than that of whites. In line with their superior economic status, their male suicide rate is the lowest of the four groups. Yet Asian women are much closer to white women in their tendency to commit suicide.

Perhaps the biggest puzzle is the behavior of women in general. Although their economic status

trails men's and although they are to three times as likely to suffer depression, their suicide rate is less one-fourth that of men.

EMPLOYERS PAR HEALTH BENEFIT

Part-timers and new hires lose

At last count in 1997, more than 10 million Americans lacked health insurance of any type—up from 31.8 million a decade earlier. In a new study, economists Henry S. Farber of Princeton University and Helen Levy of University of California at Berkeley examine a trend that may have contributed to this increase: the long decline in health coverage among workers in the private sector.

From 1979 to 1997, according to a new survey, the share of private-sector workers with health insurance whose jobs fell from 71.9% to 64.5%. Most of the drop occurring since 1980. (The share of government workers with such health coverage stayed close to 80% over the same period.)

The study asked several questions: Did the decline in coverage occur because employers were dropping health insurance plans entirely or just for some workers? And did it reflect growth of jobs that normally lacked coverage? To find out, the researchers distinguished between "peripheral" workers—defined as part-timers and those on temporary job for less than a year, and "core" workers, who are full-timers in long-term positions and who have always enjoyed a high level of coverage.

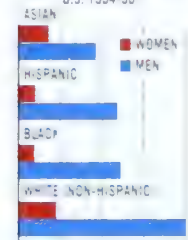
Their analysis is revealing. They found little change in either the percentage of workers whose employers offered insurance plans, or in the percentage of workers in peripheral jobs (30% of the private workforce). But they did find a sharp decline in the percentage of "peripheral" workers that is eligible for employer coverage.

There was also a rise in the number of "core" workers choosing to opt out of available plans (presumably because of high employee costs), about 10%, which was offset by coverage for their spouses' plans.

The bottom line: Employers are continuing to provide insurance for long-term employees. At the same time, however, they are cutting back coverage for their short-term and part-time employees—workers who make up a sizable part of the nation's labor

ENDING IT ALL: THE HARD NUMBERS

SUICIDES PER 100,000 PEOPLE U.S. 1994-96



MES C. COOPER & KATHLEEN MADIGAN

THE FED TAKES OUT SOME INSURANCE

Effects of inflation wither next to the threat of recession

U.S. ECONOMY

Financial markets in the U.S. and abroad were hopeful that the Federal Reserve would trim interest rates again at its policy meeting on Nov. 17, and they were not disappointed. The latest cut, coming after stronger-than-expected third-quarter economic growth and signs of continued resilience in the fourth quarter, means that the Fed is committed to assuring that financial-market instability will not push the economy into a recession in 1999.

IT SPREADS REMAIN NORMALLY WIDE



The Fed's rapid-fire reaction to global market turbulence this summer has been remarkable. After a quarter-point cut, on Sept. 29 and again on Oct. 15, in an unusual between-meetings move the Fed has now lowered its federal funds rate by another quarter-point, to 4.75%. It also trimmed its discount rate by a quarter-point, to 4.5%. But

what makes these three cuts in seven weeks unique is they have come in an economy that has grown at an annual rate so far this year and with the unemployment rate at an unusually low 4.6%. Clearly, the Fed's current focus is on the financial markets. Simply put, the Fed opted for some low-cost insurance that the recent improvement in financial conditions will continue. Why low-cost? Because with slow economic growth likely and with the October price index still tame, the recession risk associated with not cutting rates is greater than the inflation risk of cutting too much.

KEEPING ITS NOV. 17 ACTION, the Fed said that although market conditions have "settled down somewhat since mid-October, unusual strains remain." Vast spreads between the yields on riskless Treasury bonds and riskier corporate debt have narrowed, but they remain wide by historical standards, suggesting that credit is still hard to come by for some borrowers (chart). Also, the recent market calm looks tenuous, still shaky global conditions.

However, despite the firmer look of the economy in recent weeks, highlighted by strong retail sales and a pickup in October, the Fed believes that the slow-growth forecast is still the best bet for 1999. Indeed, the

economy seems unlikely to push ahead at this year's robust pace under the weight of falling exports, stagnant industrial output, falling profits, generally tighter credit conditions for businesses, and a new round of layoffs.

Where does policy go from here? Based on the Fed's statement, the latest cut, amid firmer financial markets and resilient economic data, appears to diminish the chances for another cut at the Dec. 22 policy meeting. The Fed said that given the three rate cuts since Sept. 29, "financial conditions can reasonably be expected to be consistent with fostering sustained economic expansion while keeping inflationary pressures subdued." In English, barring further market turmoil, the cuts to date should bring financial conditions in line with where the Fed wants them to be.

But much will depend on the markets. The policymakers did not slam the door on a Dec. 22 rate cut. By also lowering the discount rate on Nov. 17, the Fed implicitly told the markets that it is leaving the door open for another move, if needed.

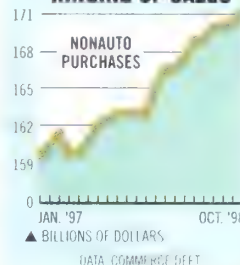
THE FED WILL KEEP A KEEN EYE on the economy, as well. So far, the economic slowdown is developing only gradually, mainly because the economy's weakness remains concentrated in exports and manufacturing, while overall growth continues to get plenty of support from consumer spending (chart).

In fact, consumers are giving fourth-quarter economic growth some solid support. Retail sales jumped 1% in October, the largest gain since May, fueled by a surge in car buying. But even excluding autos, retail purchases in the month still rose a healthy 0.5%. Consumer spending, as measured in the gross domestic product numbers, is on a track to post growth at an annual rate of 4% or more, which would be little changed from the third quarter's robust clip.

But that figure will mask a slowing trend. Fourth-quarter car buying is up from a low third-quarter level, which was depressed after spring buyer incentives ended and during the strike at General Motors Corp. Excluding autos, consumer spending is set to post its slowest quarterly growth of the year.

Also, slower inventory growth could be a large offset

RETAILERS KEEP RINGING UP SALES



to overall GDP growth this quarter. With factory output stagnant, and with car dealers' lots restocked after the GM strike, additions to stockpiles are set to slow, perhaps sharply. September business inventories rose 0.6%, much faster than the Commerce Dept. assumed when it calculated third-quarter GDP. The result: Stronger than expected September inventories will boost third-quarter GDP even more, but the falloff in stock-building this quarter could be sizable.

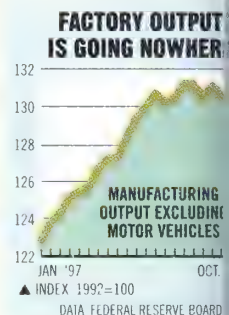
THE FED IS WELL AWARE that the latest data clearly show the economy's areas of weakness, and foreign trade is a key one. The September trade deficit narrowed from its record of \$15.9 billion in August, to \$14 billion, but the improvement is likely to be temporary. A large monthly blip in aircraft exports, which tend to be volatile, accounted for all of the shrinkage. The Boeing Co. shipped twice as many planes abroad in September as they did in August, and October shipments were scheduled to fall back.

Exports are still in their sharpest decline since the early 1980s, and that is the chief reason why manufacturing output through October has gone nowhere since the beginning of the year—and why factory payrolls are shrinking. Factory production rose 0.3% in October, but the trend looks much weaker. Excluding motor vehicles, manufacturing output has fallen in three of the past five months (chart). After declining in

the third quarter for the first time since the 1990 recession, production in October was below the third quarter average, suggesting a second consecutive quarterly drop. Also, manufacturers used only 79.4% of their production capacity in October. Strike-adjusted that's the lowest utilization rate in six years.

No wonder inflation is a no-show. Producer prices for finished goods remained exceptionally tame in October, and excluding energy and food, core prices at the earlier stages of production are falling, strongly suggesting the absence of any pricing pressures in the pipeline. At the consumer level, the consumer price index increased a modest 0.2% in October, as did the core CPI. The annual inflation rate in October stood at 1.5%, with core inflation running at 2.3%.

With the economy set to slow, there is little to suggest any significant acceleration in inflation in the coming months. And that is the chief reason to be optimistic about 1999. More than anything else, low inflation has given the Fed the leeway to act quickly and decisively in the face of financial-market stress that could threaten the economy.



ARGENTINA

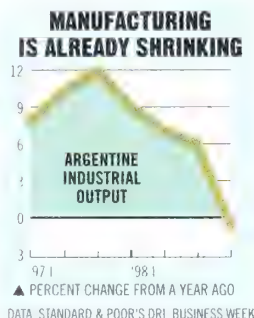
BRAZIL'S BAILOUT MAY REBOOT ARGENTINA

The International Monetary Fund's Nov. 13 announcement of a \$42 billion bailout for Brazil will not only help Latin America's biggest economy. It will also bring some relief to Argentina, which counts Brazil as its biggest export market.

After growing 7% in the first half compared to year-ago levels, Argentina's real gross domestic product will probably show no growth in the second half of 1998 as the economy struggles with the financial fallout of the Asian and Russian crises. Real GDP grew nearly 8.6% in 1997.

The industrial sector is already shrinking, brought down by high interest rates and Brazil's trou-

bles. According to a private Argentine think tank, industrial production fell 0.5% in the third quarter from a year ago, the first decline in 2½ years (chart), and it likely dropped further in October.



Vehicle output alone was down 26% vs. a year ago, although the plunge is exaggerated because October, 1997, saw a peak in car production. Still, car demand domestically and from Brazil is slumping. The data on other spending also show some weakness, which is cutting into federal tax receipts. Moreover, foreign investment plunged in the third quarter from a year earlier.

Argentina's economy will get some lift from other sources be-

sides the IMF funds for Brazil. The World Bank has approved \$3 billion in loans to strengthen Argentina's financial safety net and to stave off currency contagion. So far, foreign-exchange reserves have been steady and the peso has held firm. Also, interest rates have come down, especially those for peso-denominated loans, after having risen sharply following Russia's debt default. However, with domestic demand slacking off, credit growth is still slowing, despite the rate cuts.

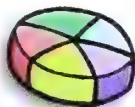
The government says that real GDP will recover in 1999, growing 4.8% for the year. But private economists are skeptical, forecasting growth as low as 1%. That because the damage done from the summer's high interest rates, consumer caution, and investor flight will take time to reverse

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SOCIAL SECURITY

COMMENTARY By Peter Coy

Only a few years back, Social Security was the dreaded third rail of American politics. Touch it and your political career was incinerated. But in 1999, Social Security reform will be at the top of everybody's agenda in Washington. Politicians of every stripe are scrambling to get in on the debate. On Nov. 19, Congress was scheduled to begin hearings on the health of the system. On Dec. 8, President Clinton will convene a conference of labor leaders, women's groups, economists, and politicians to talk about "saving" Social Security. And he'll most likely make Social Security his top priority in the State of the Union message in January. "This is going to be the numero uno debate" for Congress next year, predicts Representative James T. Kolbe (R-Ariz.).

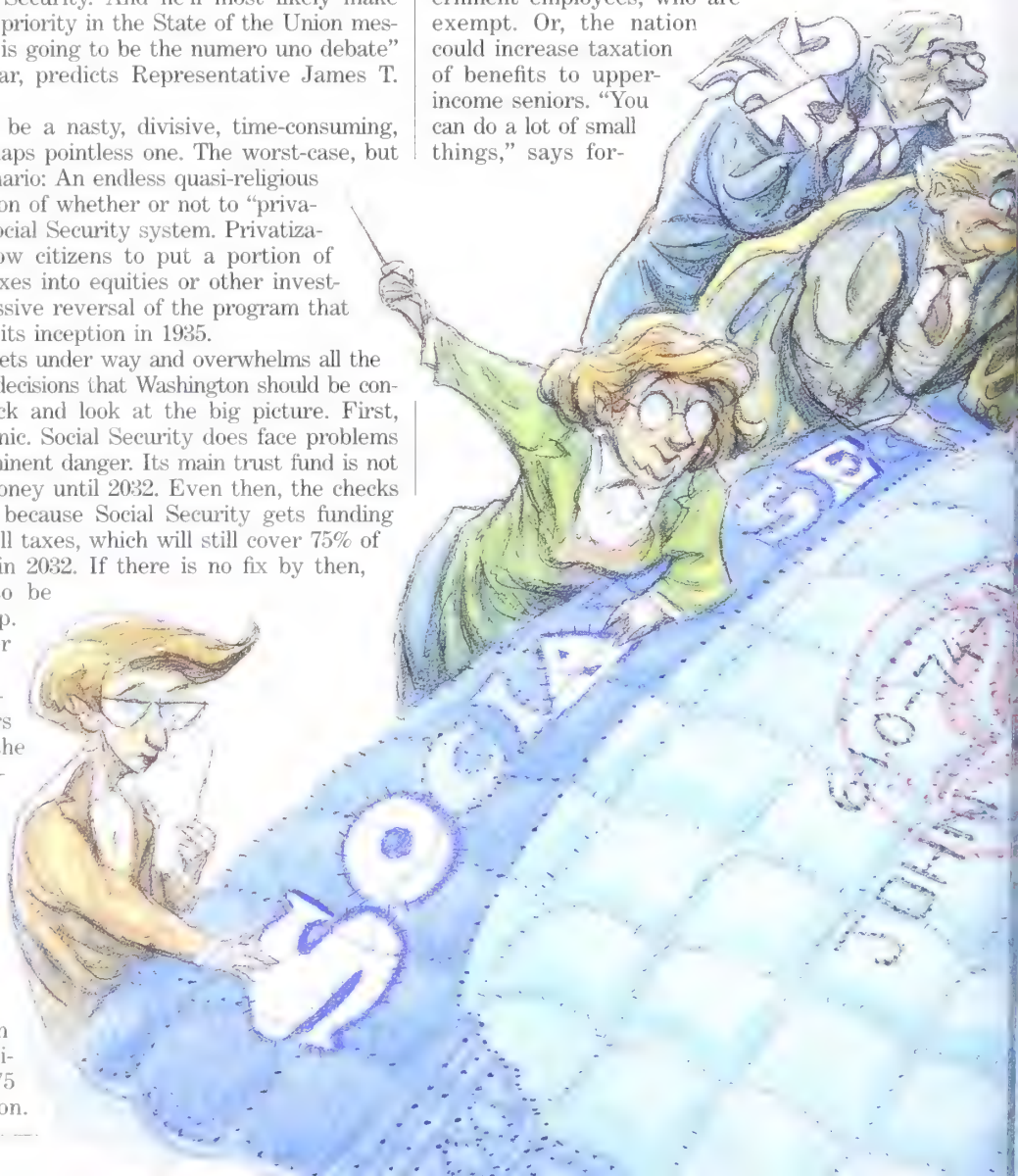
And it promises to be a nasty, divisive, time-consuming, and—in the end—perhaps pointless one. The worst-case, but hardly least likely, scenario: An endless quasi-religious debate over the question of whether or not to "privatize" portions of the Social Security system. Privatization, which would allow citizens to put a portion of their social-security taxes into equities or other investments, would be a massive reversal of the program that has worked well since its inception in 1935.

Before that debate gets under way and overwhelms all the other important policy decisions that Washington should be considering, let's step back and look at the big picture. First, there is no need to panic. Social Security does face problems ahead, but is in no imminent danger. Its main trust fund is not slated to run out of money until 2032. Even then, the checks won't stop going out, because Social Security gets funding every year from payroll taxes, which will still cover 75% of the benefits paid out in 2032. If there is no fix by then, money would have to be found to fill the gap. That could mean higher taxes.

MODEST FIXES. Economists and policymakers are concerned about the future of Social Security for one simple reason: demographics. As society ages, there are fewer and fewer workers to support each retiree. According to the intermediate projections of the Social Security actuaries, the system has an unfunded liability over the next 75 years of \$3 trillion.

Bringing it into actuarial balance would require an immediate increase in the payroll tax to 14.6%, from 12.4%. Such an increase in a tax that is already high, regressive, and unpopular seems highly unlikely.

So, what to do? Start with some modest adjustments. These might include some cuts in benefits, such as accelerating the planned increase in retirement age. The Feds could also increase the number of years of work history used to compute benefits (to include more low-wage years) and reduce the annual cost-of-living adjustment. Another, less palatable Band-Aid would be to finally bring in state and local government employees, who are exempt. Or, the nation could increase taxation of benefits to upper-income seniors. "You can do a lot of small things," says for-



LET IT BE It needs repairs, not radical surgery

White House economist Alicia H. Munnell. "This is not science." These measures aren't exactly big vote-getters. Nor are they guaranteed to save Social Security for all. But they will help.

More doable, perhaps, is a consensus that seems to be developing around allowing the government to invest a portion of the trust fund in marketable securities, such as stocks, corporate municipal bonds, and market indexes. This idea, now deemed acceptable by a diverse group including some Clintonians, many Hill Democrats, and the AFL-CIO, would help close the funding gap by providing a decent rate of return on money in the trust fund. But many Republicans and business leaders are leery about Uncle Sam owning a chunk of Corporate America.

What's more, that kind of

switch to a system of private accounts would be enormously costly. Today's workers would have to pay twice—to pre-fund their own retirement while simultaneously paying for current retirees who didn't pre-fund. The transition would likely require far bigger tax hikes or benefit cuts than nip-and-tuck solutions.

Another reason not to jump to the radical solution of privatization: We simply don't know how the economy will perform over the next 75 years. Social Security actuaries are guessing that economic growth will average about 1.7%, around half the 3.2% growth rate of the past 75 years. If they are too pessimistic—which seems altogether possible, given the economy's strong growth in recent years—then future generations will easily find ways to support the elderly, whether through some surviving form of Social Security or via another mechanism. So, it doesn't make sense to take drastic measures now on the basis of projections that are only a shade better than wild guesses.

Indeed, the ultimate answer to the Social Security problem is stronger economic growth (page 170). Faster growth brings greater wealth, making it easier to shoulder the burden of an aging population. And that's why some privatization advocates argue that boosting the savings rate by converting Social Security from a pay-as-you-go to an investment system would encourage growth. But it's far from clear that privatizing Social Security would raise the overall savings rate and produce higher economic growth. If Americans save more through Social Security, they may just reduce other forms of savings, as they have in response to such other vehicles as 401(k)s and IRAs.

But let's say privatization does create the world's largest piggy bank of financial assets. Look at the bad

example of Japan, which has been counting on its huge pool of domestic savings to take care of its aging population. All it has managed to do is choke its economy nearly to death.

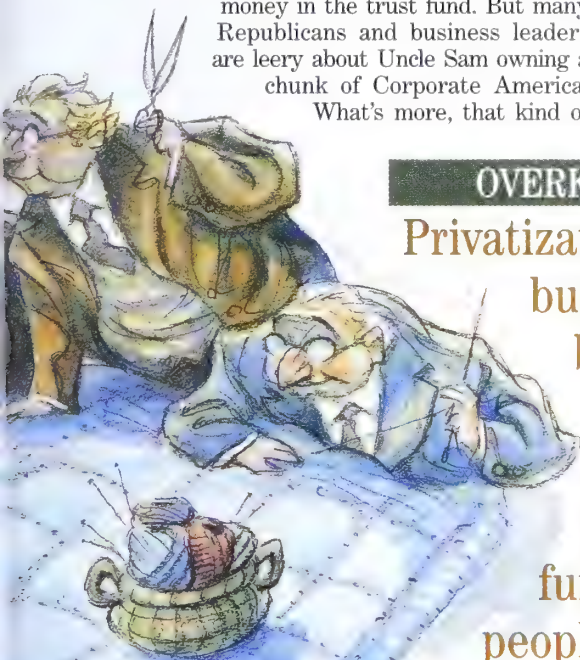
With the fundamental logic of privatization so dubious, does it really make sense to put up with all its other problems, such as exposing inexperienced investors to financial market whims? The beauty of Social Security is that it represents a shared commitment of society as a whole to meet a need that isn't well met by families on their own. The bottom line on Social Security: If it's not social, it's not security.

OVERKILL?

Privatization could
build the world's
biggest piggy
bank of
assets, but it
would also
further expose
people to the wild
swings of the market

reshuffling of assets might depress yields on other investments. That's a reason Federal Reserve Chairman Alan Greenspan said last year that it "would not be an improvement to our overall retirement system."

All these approaches are far easier to swallow than individual private accounts and far less risky. Even putting aside the philosophical debate over the merits of privatizing what was supposed to be a social safety net, there's a simple reason to avoid it: A



Coy is associate economics editor.

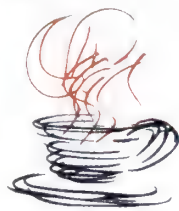
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SOFTWARE

THE REAL THREAT TO MICROSOFT

A court victory for Java could loosen Windows' grip



In testimony that has come to light in the Justice Dept.'s antitrust suit against Microsoft Corp., there's an unmistakable sense of paranoia when Chairman William H. Gates III and his executives talk about Sun Microsystems Inc.'s Java software. In E-mails that have become evidence in the trial, Gates is ever vigilant for signs that influential figures in the computer industry such as IBM are growing too fond of the Sun technology.

Now, Microsoft may have a real reason to be paranoid. Across the continent in California, a U.S. District Court granted Sun a preliminary injunction in its civil suit against Microsoft that could turn Java from a shadowy plot to a much more tangible threat. Judge Ronald M. Whyte ruled that in 90 days Microsoft must make its own Java comply with the "100% Pure" Java that Sun CEO Scott G. McNealy insists upon.

TWEAK-FREE. That may sound like legal one-upmanship between nerds, but at stake is nothing less than a battle over which type of software might prevail in the 21st century. The ruling lifts a huge cloud from over Java—the question of whether there will be a single standard for the programming language or whether Microsoft would continue to

tweak it, in violation of its contract with Sun, according to the Nov. 17 ruling.

Having a single version, pure Java, is essential to Sun's strategy: creating software that runs on any computer—from mainframes on down to whizzy handheld Internet devices—or what Sun calls "write-once, run-everywhere" programs. In practice that means that a software writer could produce a program and zip it across the Internet to perform a task on any other computer. "The Fords and GMs of the world were taking a wait-and-see attitude," says Ted Schlein, head of Kleiner Perkins Caufield & Byers' Java Fund. "This ruling will eliminate some of that risk."

That new model for developing and using software could, over time, undermine Windows' dominance and do more to unlock Microsoft's grip on the market than anything Judge Thomas Penfield Jackson's court could mete out in the Justice Dept.'s antitrust case. Java proponents say the software makes it possible to store giant software programs on powerful mainframes and servers, and then just download Java applets—small programs—to tackle each task as needed. That reduces the need for Windows and other big, "bloatware" programs such as spreadsheets and word processors that Microsoft sells.

Microsoft, according to documents that have surfaced in the federal suit, was out to

JAVA IS GAINING MOMENTUM

DEVELOPERS By the end of 1998, 900,000 software engineers will use Java, up from 700,000 at the end of 1997.

APPLICATIONS Sun lists 1,300 Java programs in its catalog—400 of which have been certified by the company as "100% Pure" Java. Analysts estimate about half that many programs use Microsoft Java. But most Java development is inside corporations and isn't included in these numbers.

USERS Some 48% of the top 1,000 companies in the U.S. have Java software development underway in-house, says Forrester Research. By 2000, that figure should climb to 72%.

DATA: INTERNATIONAL DATA CORP. FORRESTER RESEARCH INC., COMPANY REPORTS

Advantage,
McNealy: At
stake is nothing
less than a battle
over what type
of software will
be at the heart of
21st century
computing

"pollute" Sun's Java campaign by creating a unique Windows version. And it hauled Microsoft into civil court to force the contract between the companies that forbade alterations to the original to get speedier performance.

Even while the legal battle brews and programmers couldn't be sure the write-once, run-everywhere code would work, Java continued to gain momentum. The number of software developers using Java is expected to reach 900,000 by yearend, up from 700,000 at the end of 1997. Corporations from Lockheed Martin to Xerox Corp. are



make diverse computer systems together. Gillette Co. recently gave retailers the ability to check the status of orders over the Internet using Java. "I see [Whyte's ruling] as positive," says Gillette Chief Information Officer Patrick J. Zilvitis. "From a customer standpoint, the more standardization we have the better." Java is even making headway in non-Internet applications, such as screen savers. "People are writing Java-based applications at an increasing rate," says W. Beyers, general manager of Hewlett-Packard Co.'s Internet Software Services unit, which is pushing a ver-

sion of Java for the so-called embedded market—phones, appliances, etc. Adds John Seely Brown, director of Xerox's Palo Alto Research Center: "We know Java is real and can do an awful lot."

Now, Judge Whyte's injunction ensures that all software used to create Java products—even that made by Microsoft—have "100% Pure Java" code. Programmers can still write programs in Microsoft's Java, but they'll be warned that the resulting code may not work with all computers. What's more, Whyte made it clear he's likely to prohibit Microsoft from adding more "extensions" that would tweak Java for Windows.

To be sure, Whyte's injunction is only preliminary. While it's expected to be upheld, the actual trial isn't slated to start before next year. And the ruling only requires Microsoft to adapt its products, including Windows 98 and the Internet Explorer browser, to meet Sun's Java compatibility tests within 90 days. Microsoft does not foresee having to stop shipments of any of its products.

But the ruling also has immediate ramifications back in Washington, where the antitrust suit proceeds. For starters, Whyte's finding that Microsoft likely engaged in "unfair business practices" in its approach to the contract with Sun will resonate in Judge Jackson's courtroom, where the government is trying to show a pattern of such behavior (page 38). Antitrust experts say chief government counsel David Boies will likely cite the legal doctrine of "persuasive authority" to ask about such practices during testimony of Sun vice-president James Gosling, who invented Java. Says Boies: "[Whyte's] finding is material help to what we are trying to establish."

And Sun's victory could bring on more trouble for Microsoft. "When you are on a losing streak," says George Mason University antitrust expert Ernest Gellhorn, "things start to snowball—and there's no question that this is part of the snowball." Next? Experts say that other high-tech rivals may be emboldened to take on Microsoft in civil suits. Small-

fry Caldera Inc. and Bristol Technologies already have filed suits against Microsoft. And others may follow—proving that you don't have to be paranoid to feel you have enemies everywhere.

By Peter Burrows with Robert D. Hof and Andy Reinhardt in San Mateo, Calif., Susan Garland in Washington, and bureau reports



MICROSOFT ON TRIAL

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The trial has yet to sully the public's view of Teflon Bill 130

The man behind Microsoft's "strong-arm" deals 136

BusinessWeek COURT TV

Business Week and Court TV post daily updates at www.businessweek.com and www.courtstv.com. Also, "Microsoft on Trial," airs every Thursday at 7pm E.T. on Court TV.

LEGAL AFFAIRS

A PATTERN OF PREDATORY BEHAVIOR?

After six witnesses, Justice's case is coming together

The chief executive of Netscape Communications Corp. claims that Microsoft Corp. swore retribution if Netscape didn't cede most of the Internet browser market. An Apple Computer Inc. executive testifies that Microsoft threatened repercussions if Apple didn't drop most of its multimedia software products. An Intel Corp. exec says Microsoft made "credible and fairly terrifying" threats to harm Intel's new microprocessor if it didn't shelve its own software efforts. And an IBM executive says Big Blue's operating system couldn't gain ground because Microsoft discouraged software developers from writing applications for it.

See a pattern? After presenting several of its key witnesses, the Justice Dept. certainly hopes so. By piling example on top of example, the government aims to convince Judge Thomas Penfield Jackson that whenever Microsoft senses a rival's technology might threaten its dominance, it tries to bully the upstart out of the market. If that doesn't work, Justice claims, it attacks the competitor—frequently by pressuring distributors, customers, and software developers not to use the rival technology. Separately, each instance of this behavior might not prove predatory behavior. "But the government wants to show that the cumulative effect was to deter people from competing against Microsoft," says Washington antitrust lawyer William J. Kolasky Jr.

If chief prosecutor David Boies can prove that, then Jackson may be more likely—when the case reaches the penalty phase—to slap major restrictions on Microsoft's future business dealings. Says Stephen Calkins, antitrust professor at Wayne State University Law School: "At the end of the day, the government will say, 'Look at instance after instance in which Microsoft abused its monopoly power. We urge you, judge, to conclude that it can't be trusted to retain its monopoly.'"

"FULL OF GARBAGE." In its counterattack, Microsoft argues that Justice can't assert a pattern of illegal behavior if the company was merely pursuing legitimate business objectives, as it claims. "In every case, it involved a proposal to cooperate on technology," says Charles F. Rule, a Microsoft legal consultant; Microsoft was merely ensuring that other companies' products worked seamlessly with Windows. Rule says that the government, lacking a convincing major charge, is trying to compensate by laying out

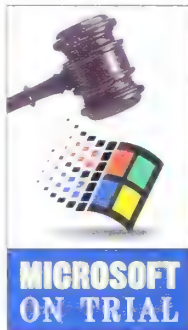
many small ones. In the end, he warns, the government may wind up with "just a garbage bag full of garbage."

How good is the government's evidence of a pattern of abusive behavior? Since the opening day, a number of witnesses have outlined the ways Microsoft attempts to influence how companies should develop technology—to limit Microsoft's advantage. Netscape CEO James L. Bardeale, the government's lead-off witness, told how Microsoft tried to push Netscape out of the Windows market. Later, Intel Vice-President Steven McGeady testified that Intel was pressured to drop a software product because Microsoft threatened to withhold Windows support for a new Intel chip.

If the competitors ignore Microsoft's threats, the software giant next launches a battery of predatory attacks—including everything from giving away their version of rivals' products for free to encouraging distributors to shun them. When

Apple refused to stop pursuing the market for multimedia software, Microsoft persuaded Compaq Computer Corp. to drop its plans to include a new version of Apple's QuickTime multimedia package in its computers, according to Apple Senior Vice-President Aradis Tevanian Jr.

Justice has also managed to bolster its challenge to the legality of Microsoft's bundling of its Internet browser with Windows—a key facet of the original DOJ complaint that has been weakened by an appeals court ruling. In court, Boies's team has shown that the bundling technique



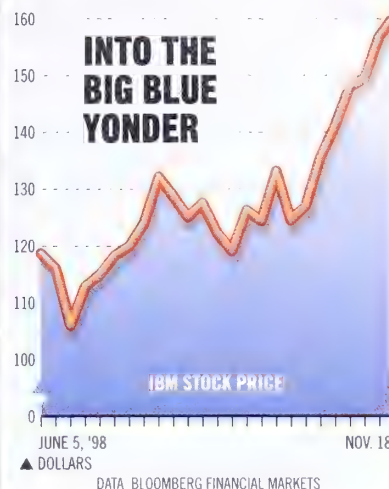
REPEAT OFFENDER

IBM, Apple, Intel; Justice hopes to prove that Microsoft has demonstrated a pattern of strong-arming partner and rival alike

that Microsoft supposedly used to thwart Netscape is a tactic that the software maker has used repeatedly. For instance, Justice has testimony indicating that Microsoft bundled a competing program to Apple's QuickTime. And an executive from America Online Inc. testified that Microsoft's decision to bundle its own online service, Microsoft Network (MSN), into the operating system was a club it used against AOL to get it to promote the Microsoft browser.

Microsoft's playbook calls for tearing down each case one by one. But as Justice piles on one damning tale after another, it hopes to produce a whole picture of monopolization that is far bigger than the sum of its parts.

By Susan B. Garland in Washington and Mike Fromer in New York



PUTERS

IBM, NOTHING BUT A BLUE SKY—FOR NOW

mainframes, E-commerce, and services have it soaring

quiz: What computer company's stock has skyrocketed 50% since June—and it's not an Internet start-up or a pure play in software or personal computers? The answer: IBM. The stock of Big Blue, which is in all those areas and more, is hovering around \$160, up from \$106 in June. It's right up there with Dell Computer Corp.—and well ahead of Microsoft Corp., whose stock is up ap-

proximately 16% in the same period.

Why are investors so giddy about a high-tech company whose last name isn't ".com"? IBM seems to be overcoming its growth problem. For the first half of 1998, revenue grew just 1%, owing to abysmal hardware sales, weak international business, and an anemic software unit. But with the business climate improving in Europe, new mainframes, and its PC unit working off an inventory

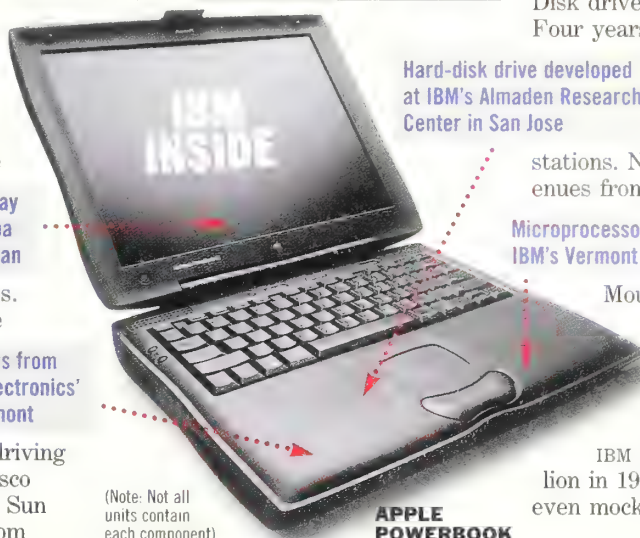
glut, IBM generated 8% revenue growth in the quarter ended Sept. 30—a rate it hasn't seen for two years. That blew by Wall Street forecasts of 3.5% growth. "We're clicking on all cylinders," says IBM Chief Financial Officer Douglas L. Maine. Analysts, enthralled by IBM's string of earnings gains, say the stock could hit \$185 in the next 12 months.

What's driving the growth? Part of it is cyclical: For decades, IBM has enjoyed a growth spurt when new mainframes ship. And the G5, which began reaching customers in September, has kept up the tradition—accounting for a 20% boost in mainframe sales in the third quarter.

But there's more. While IBM is no Yahoo!, it is a major player on the Web. On Nov. 11, CFO Maine told analysts that up to 33% of this year's revenue—\$27 billion—will involve E-commerce applications, both hardware and software. IBM

THE SUM OF ITS PARTS IS ADDING UP

Look under the plastic of an Apple Powerbook, and you'll find IBM inside. From the PowerPC G3 microprocessor to the hard-disk drive to specialty chips, Apple uses Big Blue components for the guts of its hot-selling portables. Even the nifty screen on some Powerbooks is in a joint venture of IBM and Toshiba Corp. Apple is just part of what's driving IBM component business. Cisco Systems, Hewlett-Packard, and Sun Microsystems all purchase custom-



chips from IBM, whose semiconductor division is now pushing \$3 billion in annual sales—up from zero in 1992. Disk drives are another bonanza.

Four years ago, IBM trailed such specialists as Seagate Technology, Quantum, and Conner Peripherals in drives for PCs and work-

stations. Now, IBM is No. 1 in revenues from such drives, with 23.9% of the worldwide market, according to Disk/Trend Inc. in Mountain View, Calif.

Customers include Sun and Compaq Computer. All told, sales of key components have been growing about 44% a year, IBM says, and should top \$6 billion in 1998. Half in jest, managers even mocked up a logo: IBM Inside.

By Neil Gross in New York

COMMENTARY

By Richard A. Melcher

MONSANTO MAY BE COUNTING ITS CHICKENS

is even getting Web-savvy itself: It's selling online \$7 million a day worth of such gear as PCs and disk drives. Dell Computer Corp., the current king of online computer sales, does \$10 million a day.

Then there's the \$19.3 billion high-tech service business that has been growing more than 20% quarterly for six years. Until recently, such services as outsourcing were mostly a U.S. phenomenon. But big service deals, such as the \$2.4 billion contract IBM signed with Cable & Wireless Ltd. in September, are starting to open up overseas. Now, IBM has a \$49 billion backlog of service contracts. That should smooth the bumps in future hardware product cycles.

DOWNSIDE. What could slow IBM's momentum? For starters, there's the Year 2000 problem. It could be a boon, as customers require more gear and services. Or customers could postpone new orders for big-ticket items such as mainframes to focus on fixing existing programs. That chance led Gary Helmig of SoundView Financial Group Inc. to cut his estimate of IBM's revenue growth to 7%, from 10% for 1999. Concedes Maine: "It's difficult to determine whether Y2K will be a risk or a benefit."

In addition, the mainframe boom will subside in 1999, when most customers will have traded up. Then mainframe sales will resume their long-term, downward trend. Helmig predicts mainframe sales will decline 10% next year from an estimated \$5.5 billion this year.

What's more, in its PC business, IBM, like Compaq and Hewlett-Packard, is trying to come up with a distribution strategy that can match Dell, which profits handsomely by selling direct. A roller-coaster operation for IBM, the company's PC unit eked out a modest profit last quarter, after losses during the first half of 1998. IBM has a senior exec studying the possibility of direct sales. The company already sells some PCs that way, but analysts don't expect it to go entirely direct. Such a strategy could backfire if it turns off IBM's dealers.

IBM may have to fight to maintain its PC services revenue, too. Rick Nathenson, head of the services unit of Entex Information Services Inc., says his company has replaced IBM at up to eight companies, including AlliedSignal, which has 30,000 PCs. IBM says desktop services revenue continues to grow.

So far, investors are bullish. Wonders Helmig: "If there is a slowdown in the second half, will investors look right through it?" If they have stuck with IBM through the years of lean growth, then the answer is probably yes.

By Ira Sager in New York

In his optimistic moments, Robert B. Shapiro likes to compare his agriculture and pharmaceutical company to Microsoft Corp. and Intel Corp. Monsanto Co. is providing the chemical equivalent of chips and operating systems in genetically engineered seeds licensed to farmers. But perhaps Shapiro should compare Monsanto to medical biotech—an industry that for two decades has shown huge promise, soaked up billions in investment, and produced only a handful of winning products.

Indeed, the 60-year-old exec could use some optimism right about now. As recently as June, it seemed Shapiro had found a way to realize Monsanto's plan to blend seeds, biotech, and drugs into a "life sciences" behemoth. He agreed to merge his \$7.5 billion company with American Home Products Corp., nearly twice its size, hoping for financial stability and access to global markets. But the deal collapsed in October, leaving his team to cobble a Plan B. They're gearing up to sell off \$1 billion in assets and raise \$4 billion in new debt and equity.

Does the life sciences dream still hold promise? Yes, say industry analysts, investors, and executives, who insist that farmers will buy genetically engineered seeds. And Monsanto's track record proves as much: Monsanto-engineered seeds for soybeans and corn have grabbed 37% and 15%, respectively, of all U.S. plantings in less than three years.

Certainly, the list of companies joining Monsanto in life sciences, from DuPont and Novartis to Hoechst and Dow, suggests the field is promising. But that very rush into

the business is part of Monsanto's problem. A scramble for assets pushed Monsanto to rush into acquisitions of four seed outfits in the past six months, spending \$6 billion.

LITTLE POP. The huge spending comes as Monsanto is trying to roll out yet more new seed technology and a series of new products—led by its arthritis drug, Celebrex—at its G. D. Searle drug unit. As a result, Monsanto expects little pop in earnings in the next

years. Shapiro is telling investors that \$4 billion it hopes to raise will tide it over. Yet, says A. Nicholas Filippello, director of investor relations, "this does not mean we will slam the door on some kind of business combination." Analysts and industry officials say Monsanto could pair with any big rival. DuPont and Novartis are mentioned most often.

Longer term, it's not certain that consumers and regulators will accept the

next phase of life science—plants and processed foods that include everything from vaccines to cholesterol-lowering compounds. "There is a big question about whether, what, or how soon a payback there will be," says Charles S. Johnson, chairman of seed producer Pioneer Hi-Bred International Inc.

Which is why Shapiro prefers to look on the bright side. He has sold Wall Street on the idea that there's life in life sciences. And he has gone a long way toward recasting a stodgy chemicals and ag company. But it will be a long time before Shapiro can know whether Monsanto will be the Intel of life sciences or another tech wannabe.



SHAPIRO: Seeing the bright side

Melcher is Chicago bureau chief

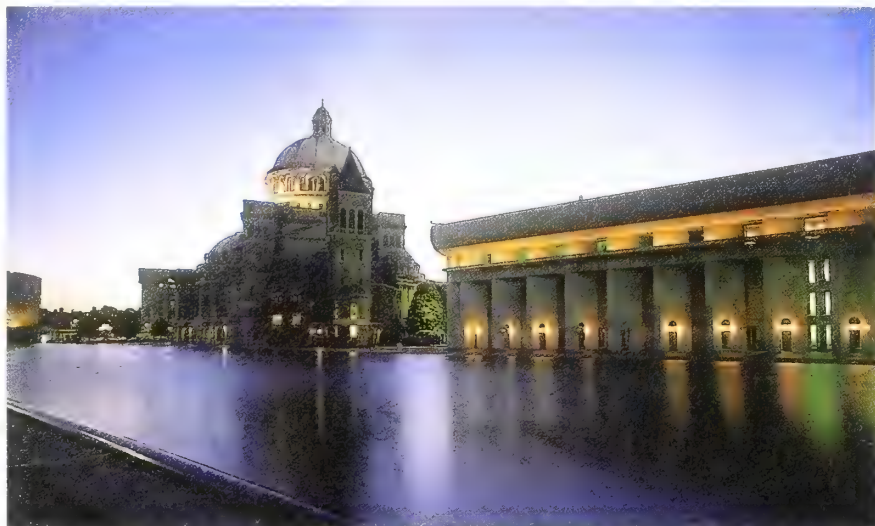
**What is
at the heart of
ALSTOM?**



THE PRESS

IS A REVIVAL UNDER WAY AT THE CHRISTIAN SCIENCE MONITOR?

A venerable paper has faith that a fresh format will lure readers



UPDATE: For the Boston headquarters, a new, multimillion dollar newsroom

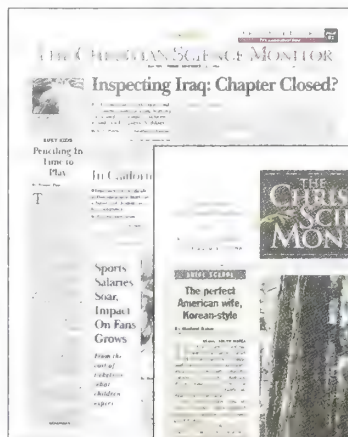
Can *The Christian Science Monitor*, the original national daily, stage a comeback? The paper has lost two-thirds of its circulation in the past 10 years and hasn't turned a profit since 1956. And for the fiscal year ending Apr. 30, it is expected to lose \$18.1 million, its biggest shortfall in a decade.

Any sharp-eyed executive would pull the plug. But the Christian Science Publishing Society is no ordinary business—it's a vital element in the mission of the Church of Christ, Scientist. So the *Monitor* is set for a massive revival. Construction has begun on a renovation of its Boston headquarters, including a high-tech newsroom. And on Nov. 16, a redesigned *Monitor*—aimed at attracting a wider audience—appeared. The publisher is more than doubling spending on marketing and is exploring home delivery, instead of using U.S. mail.

BANKROLLED. Not that any of these moves is aimed at a return to black ink. "It would be difficult if I had to face shareholders," admits John L. Selover, who oversees the *Monitor* as manager of the publishing operation. But making money has never been the *Monitor's* goal. Chronic losses are covered by the church, which views the paper "as a public service," says Selover, who's also vice-chairman of the church's board.

Selover's aim is to "reach a wider au-

dience," thus restoring the *Monitor's* clout and its role as a paper that presents in-depth coverage of serious issues. The *Monitor* was the last major initiative of church founder Mary Baker Eddy, who launched it in 1908 to give readers a sober alternative to the day's sensational press. By 1988, when circulation peaked at 242,000, its award-winning journalism regularly put it "on lists of the top 10 or 20 papers in the U.S.," notes Sig Gissler, a professor at Columbia University's Graduate School of Journalism and former editor of the *Milwaukee Journal*. Even now, the *Monitor* remains an excellent paper, with six Pulitzer prizes under its belt.



DESIGN AND CONQUER: A cleaner revamp, with more space for news

The *Monitor's* troubles began when the church put the paper on the burner to pursue a disastrous foray into broadcasting. By the time the church pulled the plug on TV in 1992, losses exceeded \$300 million. There's money for the paper again—but it will be harder to make it a "must read," cautions Gissler. In the *Monitor's* heyday, it didn't have much national competition.

Indeed, the *Monitor* is now the underdog in a high-stakes race. *USA Today*, *The New York Times*, and *The Wall Street Journal* all have million-plus circulations. And the *Los Angeles Times* has just added its own national edition. "It will be very difficult for the *Monitor* to make a significant impact," says newspaper consultant John Morton.

BIFOCAL SET. The *Monitor* is also 10 years behind on the business side. Advertising normally accounts for 75% of the paper's revenues, but it's an afterthought at the *Monitor*, which often gives votes less than two pages to advertisers. "It will be very hard to attract"—given the paper's small circulation, warns Morton, and given the average reader's age: 61. More circulation would help. But "we would need 300,000 readers to break even," says Selover.

Still, there's no doubting the zeal the church brings to this effort. The *Monitor* has hiked salaries and hired new editorial employees, boosting editorial payroll by \$2.3 million. In January, it will open its 12th foreign bureau. The new design boosts by 8% the space allocated to news, while using a cleaner layout to draw attention to the *Monitor's* blend of in-depth coverage with trends in education and the arts.

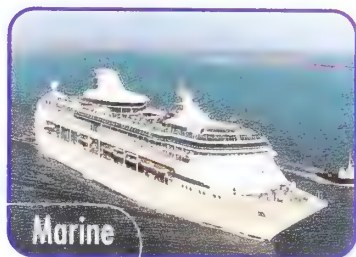
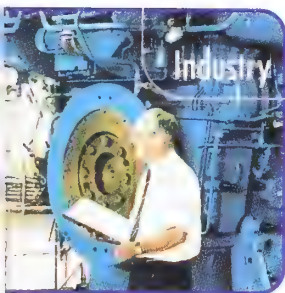
To promote the paper, Selover plans a \$500,000 ad campaign in *The New York Times*, *The Wall Street Journal*, and other national publications. In January, a \$2 million direct-mail campaign is scheduled to begin. Selover says he may

be in for a national deal for home delivery in the next months.

How well can the *Monitor* do? With the church apparently willing to subsidize the paper indefinitely, the *Monitor* should be able to continue its special brand of journalism past the millennium. The question is: How much attention will people be paying?

By Willie Symonds in Boston

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INFORMATION AGE

THE DIGITAL CHILDREN'S CRUSADE

Cyberkids are taking on big issues—with a corporate assist

How many kids does it take to change the world? Three thousand or so should get the ball rolling, figures the Media Lab at Massachusetts Institute of Technology. That's how many 10- to 16-year-olds from 139 nations are taking part in Junior Summit '98, an ambitious experiment to tell adults what the new digital generation has to say.

For three months, linked by the Internet and language-translation technology, the youngsters have been debating online the issues they believe children can act on, including poverty, malnutrition, technology access, and education. And at a meeting in Cambridge, Mass., on Nov. 21, 100 delegates will lay out their agenda. It will be, says Media Lab Director Nicholas Negroponte, a wake-up call to the world's powerful, but technology-challenged, grownups. "Their biggest problem is that they arrived on the planet too soon," he says. "The way they can address this is by interacting with kids." Executives and politicians have been invited to observe, and delegates will present their recommendations by video link to the U.N. General Assembly.

The Media Lab solicited participation for the summit from 1 million kids via ministries of education, cultural and

school groups, and the Internet. Applicants were judged on essays, music, or graphic images that described global problems and solutions. By this summer, the roster was in place, and researchers fanned out to set up computers in schools and community centers for participants who didn't have them.

The scale of the effort has captured the imaginations of Citigroup, LEGO Group, and Swatch Group, each of which paid \$300,000 to sponsor the \$2 million project. (MIT is picking up much of the rest.) LEGO and Swatch already have products aimed specifically at young, tech-savvy consumers. Swatch, for one, plans to make delegates the first test

WIRED: Junior Summit '98 delegates receive pagers for the conference

group for a wristwatch that marks ternet time," a metric system that divides the day into 1,000 "Swatch be-

But the real opportunity, say, sponsors and corporate observers including Eastman Kodak, IBM, and Intel is to see how the kids use digital technology. "This is not something technological," says Yann S. Gamard, president of the Swatch Telecom unit. "It's something boring and chewed on for years." Execs anticipate the chance to encounter outside-the-box thinking, see what's on kids' minds, and perhaps to strike sparks that could lead them to view their businesses in a different light.

NO BIG DEAL. So how does the first digital generation approach technology? For one thing, "we don't make a deal out of it," says 16-year-old Canadian Tsipora Mankovsky. "We just do." That widespread nonchalance surprised Junior Summit director Justine Cassan, an MIT assistant professor. "It makes me wonder whether the kids have passed the stage where they think the digital world is the be-all and end-all where they can make change using technology where it is more appropriate."

Those who travel to Massachusetts will report back to their online pages using Internet-linked whiteboards, two-way pagers from Motorola. They'll propose resolutions on a children's Bill of Rights and kids' representation in their nations' governments. Their object: more roles for kids, delegate Makonnen David Hannah, who advises the government of Jamaica on kid-friendly technology policies.

They'll also lobby for universal access to phone service to get other kids wired. And they'll hash out the proposal for a Junior World Bank, finance corporations, government grants, private donations, that would provide financing to equip schools with Internet-ready computers and network connections.

If it all sounds mushy, open-ended, that's by design. Negroponte and his surrogates say their point is not to force closure. Rather, they are pushing the kids to set their own priorities—to use their new collective voice to make some noise. It change the world? For Junior Summit's 3,000 participants, at least, it already has.

By Paul C. Judge in Cambridge, Mass.

BEYOND SURFING

Agenda for Junior Summit '98

JUNIOR WORLD BANK To provide loans for computer and Internet access

CHILDREN'S BILL OF RIGHTS Would include universal access to local phone service

KIDS' PRESS CORPS To focus attention on global issues concerning children

GOVERNMENT ADVISORY TEAMS To give kids input on tech policy

PHOTO: MIT MEDIA LAB



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EDITED BY KELLEY HOLLAND

LIVENT STAGES A MELODRAMA

THE PLOT THICKENS. LIVENT, the Toronto-based production company that dazzled Broadway with big-budget, musical extravaganzas, filed for Chapter 11 bankruptcy protection on Nov. 18. The company blames its woes on financial irregularities it says were spawned by former CEO Garth Drabinsky. The company, now run by former brokerage chief Roy Furman, also sued Drabinsky and associate Myron Gottlieb for fraud, seeking about \$147 million in damages, and formally fired both men. Among other things, Livent alleges the men got kickbacks. Drabinsky, in turn, announced that he is

suing Michael Ovitz, Livent's controlling shareholder, along with Furman and others, for damages totaling \$65 million. Gottlieb expects to sue as well.

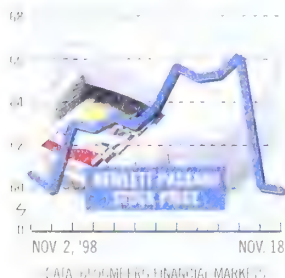
RITE AID ENLARGES ITS MEDICINE CHEST

RITE AID CHAIRMAN AND CEO Martin Grass has a new prescription for growth. On Nov. 17, the 44-year-old Grass announced he would shell out \$1.5 billion in cash to buy Eli Lilly's pharmacy benefits management unit, PCS. The move is likely to make Rite Aid a more appealing partner to HMOs. It comes as Grass, son of Rite Aid founder Alex Grass, continues an aggressive expansion of the drugstore chain that has included a series of acquisitions and the opening of 1,040 stores since 1995.

CLOSING BELL

WHIPSAW WEEK

Hewlett-Packard may be the granddaddy of Silicon Valley companies, but lately its stock has been as volatile as that of an Internet startup. It rose from 49½ on Oct. 7 to 66½ on Nov. 16 due to an improved outlook for PC sales and prospects for new printer products. But on Nov. 17, after HP reported just a 4% rise in quarterly sales and hinted at continued softness, the shares fell 9.4%, to 60½. Wall Street's message: Cost-cutting is fine, but investors want the 20%-plus earnings growth of the mid-1990s.



SAVING TEL-SAVE FROM RED INK

TEL-SAVE.COM WANTS A BETTER connection to profits. On Nov. 16, the New Hope (Pa.) long-distance discounter named Gabriel Battista its CEO. Battista, formerly CEO of Network Solutions, the company that doles out Internet domain names, hopes to stop losses—\$41.7 million in the third quarter—by adding wireless and local phone services. Like the long-distance service, they will be sold via America Online and direct marketing. Tel-Save has been losing money because of high upfront fees it paid AOL. Battista will also help develop a Web site as another distribution channel.

A NEW MEMBER OF BOEING'S CREW

BOEING HAS LANDED DEBORAH Hopkins, 44, as chief

HEADLINER: J.T. BATTENBERG III

DRIVING SOLO—AT LAST

DaimlerChrysler isn't the only new company in Detroit. As expected, General Motors said on Nov. 16 that it will give Delphi Automotive its independence, starting with an public offering of up to 19% of the \$31.4 billion auto parts subsidiary—which is expected to raise \$1.5 billion.

Leading Delphi is J.T. Battenberg III, 55, a career GM exec. Battenberg has been overhauling the unit since 1992. "We will be quite a different company," he says. Already, he has cleaned house. In the past four years, he closed over 50 plants and sold 17 opera-



tions. GM plans a \$200 million to \$250 million fourth quarter charge at Delphi to write down assets and pare headcount. That's sure to raise the ire of the United Auto Workers. So will his effort to get out of GM's contract with the UAW, which pays workers \$45 an hour in wages and benefits—more than twice what parts makers pay. "Would I like a separate agreement? Sure," he says. "But it's still early in the game." And when it comes to the UAW and GM, the game's outcome is always doubtful.

By Keith Naughton

financial officer, filling a slot open since former CFO Boyd Givan retired Sept. 1. Hopkins, who was CFO of General Motors Europe, will have her hands full at Boeing, which is trying to modernize its troubled operations, combine several information systems, and more. But her experience outside aerospace, including a 13-year stint at Unisys, should help her be, as CEO Phil Condit says, "an agent of change."

PAC MAN OF THE TRASH INDUSTRY?

TRASH TALK: GARBAGE COLONEL Waste Management is "disappointed," the company says, by the Justice Dept.'s objections to its efforts to bag Eastern Environmental Services for about \$1.2 billion in stock. Justice on Nov. 17 joined with New York, Pennsylvania, and Florida to ask a federal court to block

the deal on anticompetitive grounds, sending Eastern shares tumbling 14% on Nov. 17. The immediate issue: New York State's \$6 million garbage hauling contract. When the job was first awarded in October, USA Waste, Houston, Waste Management of Chicago, Eastern Environmental, and Browning-Ferris Industries were the top bidders. Since then, Waste has acquired Eastern and taken its name. Now it wants Eastern

ET CETERA...

- Cisco Systems and IBM will link their network hardware and software.
- Euro Disney's second profits rose 16%, thanks longer hotel stays.
- A federal grand jury evidence on Beverly Hills' Medicare billing.
- K-tel shares plunged 18 as the company was forced to delist of its stock.

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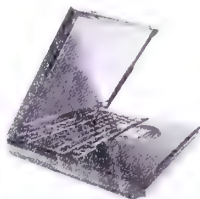
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EDITED BY OWEN ULLMANN

THE FRIENDS OF BOB: WHO HAS LIVINGSTON'S EAR

These days, the phone in Washington lobbyist Jay Stone's office rings nonstop. No wonder. He's a member of Washington's most exclusive new club: the Friends of Bob, a business anxious to make connections to House Speaker Bob Livingston, the once-obscure lawmaker's associates are being avidly courted in a mad scramble for Capitol influence.

Stone became an FOB more than 35 years ago, when he and Livingston partied together at Tulane. Stone worked on Livingston's first House run and remains a close friend. Besides Stone, Livingston's power network is a thick gumbo of Louisiana ex-aides turned lobbyists, and New Orleans execs like Frank B. Stewart Jr., chairman of funeral-home operator Stewart Enterprises Inc. Now, everyone wants to be a friend. "People I haven't talked to in years suddenly my best friends," says an ex-aide of Livingston who is now a business lobbyist.

Appropriations Committee chairman, Livingston styled himself as a scourge of big government. But like his Senate counterpart, Majority Leader Trent Lott of Mississippi, Livingston has worked overtime for largesse back home. He channeled millions to shipyard defense contractors. One of the biggest winners: New Orleans shipbuilder Avondale Industries Inc., where Livingston is mother once worked. It has received more than \$1 billion in federal contracts since 1995.

BOB BOYS. All together, Livingston's buddies in defense, shipping, agriculture, insurance, and medicine conceded nearly 50% of the \$2 million he raised for his reelection leadership committee, BOB's (Building Our Bases) PAC. Livingston's Bob-o-Gramps—he sent checks to 97 GOP candidates—built up chits that aided his leadership bid.

In contrast to Newt Gingrich, whose inner circle was a mix

of conservative theoreticians and veteran pols, Livingston confides mainly in trusted Hill colleagues. Louisiana GOP Representatives Jim McCreery and John C. Cooksey are among his closest friends.

Beyond the Bayou Boys, confidants tend to be Appropriations panel members and fellow committee chairs, among them Bill Archer (R-Tex.) of Ways & Means and Commerce's Tom Bliley (R-Va.). Livingston's vow to restore the clout of committee chiefs has business lobbyists' hearts aflutter because they think it will become easier to win pet provisions.

Already, lobbyists close to Livingston have helped him raise scads of cash. Stone, who works for Van Scoyoc Associates Inc., hosted an early-November fund-raiser in Chicago that raked in \$25,000 for BOB's PAC. Ex-aide Dean R. Sackett III, vice-president of the National Association of Professional Insurance Agents, has tapped trade associations on Livingston's behalf. Other K Street connections include former Louisiana Representative W. Henson Moore, now CEO of the American Forest & Paper Assn., and Texaco Vice-President James C. Pruitt, also a former Livingston aide.

Whose clout might suffer under Livingston Inc.? Environmentalists, for one, feel a chill in the air. "Livingston has an abysmal environmental record," says Daniel J. Weiss, political director of the Sierra Club. Religious Right activists aren't thrilled, either. As Speaker, Livingston aims to keep spending bills free of controversial riders on abortion and human-rights violations.

Livingston's Cajun cadre may lack the intellectual pretensions of Gingrich's high command. But with revolutionary fervor out and dealmaking in, business reps know exactly how to cope. They're calling anyone with even the remotest Livingston connection—and reaching for their checkbooks.

By Amy Borrus and Paula Dwyer



BUSINESS BUDDY: *The Speaker-to-be*

CAPITAL WRAPUP

UNIVERSITY GOP-STYLE

You'll be seeing a lot of Representative J. C. Watts Jr. (R-Okla.) now that he won an upset victory for the No. 4 House GOP leadership post. The only black Republican in Congress, Watts is energetic and articulate—just the ticket for his new job as top communicator of the GOP message. The party will also replace Representative Jennifer B. Brown (R-Wash.), even though she was able to oust Dick Armey of Texas as Majority Leader. A gracious loser, she tried to close the GOP's gender gap.

GREENS FLEX THEIR MUSCLE

► They may be on the outs with the new House Speaker (above), but environmentalists have growing clout at the ballot box. All five Senate candidates on the League of Conservation Voters' hit list lost on Nov. 3, while the League's top 10 enviro-friendly candidates won. The Sierra Club says a last-minute blitz helped defeat anti-green GOP House candidates in Kansas and Washington. The environmentalists' early target for 2000: Senator Rick Santorum (R-Pa.).

PHILLY: THE GOP'S FUTURE?

► Republican insiders were stunned when the GOP decided that on the whole, it would rather be in Philadelphia for its 2000 national convention. Why the home of the cheese steak? The GOP was lured by the city's new arena and the political possibilities. Although Bill Clinton carried Pennsylvania in '92 and '96, Republicans hope to win back many of the state's blue-collar ethnics and affluent suburbanites. The GOP also wants to show it will be competitive in the Northeast.

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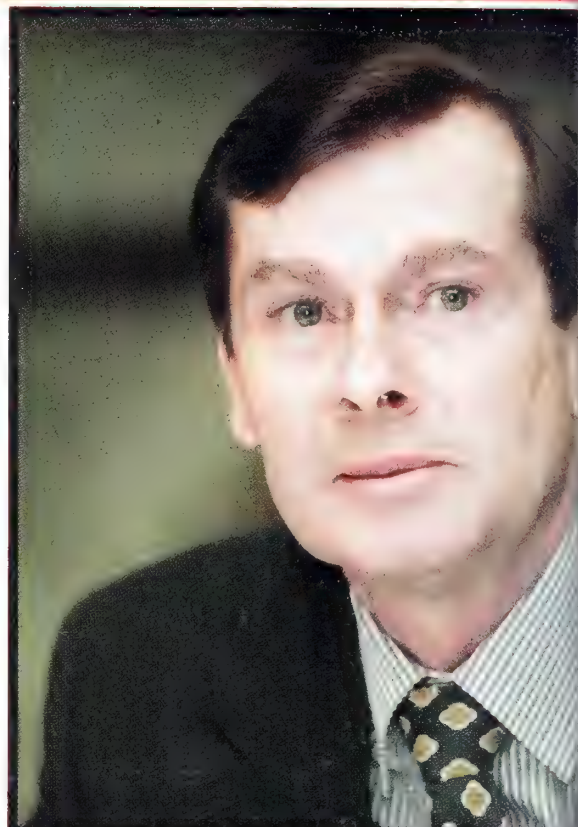
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BOSSES UNDER FIRE



(CLOCKWISE FROM LEFT) DORMANN, VON PIERER,

European CEOs are scrambling to meet the demands of shareholders

Christian Strenger, an unassuming 55-year-old, hardly looks like a guy who could send tremors down CEOs' spines. But as chief executive of DWS, Deutsche Bank's mutual-fund arm, he controls assets of nearly \$95 billion. Since the early 1990s, he has quietly prodded companies to boost shareholder returns, and lately he has made real headway. In just the past two weeks, three pillars of Germany

Inc.—conglomerate Siemens, retailer Metro, and most recently, chemical maker Hoechst—have launched or sped up long-awaited restructurings, partly thanks to Strenger's persistence.

After years of struggling behind the scenes to influence corporate behavior, shareholders across Europe are starting to achieve results. In recent months, they have fired CEOs and dismissed entire boards. They have blocked plans to relocate corporate headquarters and forced companies into greater disclosure. And they have banded together to prod corporate laggards into restructurings and mergers.

The rise of shareholder activism comes just as Europe's CEOs are under pressure from powerful global forces to improve performance. For one thing, the ongoing crises in Asia and Russia are hurting their bottom lines. Perhaps

more important, the advent of the single currency is changing the way equity investors approach Europe. Beginning Jan. 1, stocks in all European Monetary Union nations will be priced in euros. Institutions and individuals alike are increasingly looking outside their national borders for higher returns. "Investors will make their comparisons on a European basis," says Michael Todor, managing director at Morgan Stanley. Dean Witter in London.

TATTERED STRATEGY. Even some of Europe's most seemingly impregnable corporate fortresses are under fire (table). The CEOs of these companies may blame their problems on economic tumult, but investors aren't accepting any excuses. Take British Airways, which bills itself as "The World's Favourite Airline." With the unraveling of its long-planned alliance with American Airlines,

TURMOIL IN THE BOARDROOM

DATA: BUSINESS WEEK

HOECHST

After promising for years to turn Hoechst into a life-sciences company, CEO Jürgen Dormann is spinning off the chemical business, and there are rumors of a merger with Rhône-Poulenc.

TELECOM ITALIA

A management shakeup and a flagging stock price brought down former Chairman Gian Maria Rossignolo in October. His replacement, Franco Bernabè, faces stiff competition from telecom upstarts.

PHILIPS

Amid plant closings and a failed joint venture with the U.S.'s Lucent Technologies in cellular phones, opposition to CEO Cor Boonstra is growing.



Global economic turmoil and the euro have raised the pressure on Europe's execs

say an investment banker and a management consultant close to Hoechst.

Investors are taking aim at other big European companies. Swiss industrial conglomerate Alusuisse-Lonza is talking with German energy giant VIAG about merging their packaging businesses. Although the companies have been flirting for years, this time, investors—including Switzerland's fearsome Martin Ebner, who has an 11.2% stake in Alusuisse—are making it clear that they'd like to see action. Similarly, to keep institutional investors content, Siemens CEO Heinrich von Pierer announced earlier this month that he would divest \$10.2 billion in businesses, including the chips unit.

Some institutional investors in Europe are joining forces to push for change. In March, 15 Dutch pension funds with \$42 billion worth of holdings in Dutch companies teamed up to investigate the corporate-governance practices of all companies on the Amsterdam market index. At the top of their hit list is long-struggling Royal Philips

Electronics (page 54). Fund managers at its Mar. 13 annual meeting protested a juicy options scheme, then worth \$175 million, that Philips had put in place without fully disclosing its details to investors. Company officials promised to take investors' objections into account when handing out options this year.

BITTER PILL. Institutions have another fight to pick with Philips CEO Cor Boonstra: a controversial antitakeover plan that's up for renewal next year. Warns Paul Frentrop, co-director of Dutch Corporate Governance Services: "We can't let them have an eternal poison pill." Many analysts say Philips would generate more value if it were broken up.

There could be more showdowns as American institutions partner with Europeans to turn up the heat on complacent managers. California Public Employees' Retirement System (CalPERS),

any's international strategy is in and its stock price has halved the start of the year. CEO Bob is feeling the heat, as some of the biggest investors start to question leadership. Says one: "Two-and-a-half years after announcing the merger, we have to ask whether this could have gone differently."

Publicly voicing doubts about a corporate chieftain marks a dramatic shift in European fund managers. Until now, performance was largely measured not that of other managers in the country. Now that they must compete internationally for investment capital, they are far more eager to wring the most out of their assets. "There has been a sea change in the willingness of institutional investors to flex their muscles," says Stewart Bell, research director at Pension & Investment Research

Consultants Ltd., which has about 55 pension funds as clients.

Strenger has long agitated for faster change at chemical giant Hoechst, which is trying to focus itself on life sciences. Partly in response to Strenger and other investors, the \$26 billion giant on Nov. 17 announced that it would break itself up into a drug company and Celanese, a separately listed chemical concern. "We see the pressure. We are facing it. We are prepared," says CEO Jürgen Dormann.

Scrutiny of Dormann is likely to continue. Since he surprised investors by reversing course on a restructuring plan last year, Hoechst's stock has been more volatile than many other German blue chips. But in the past month, the shares have jumped 35% on talk that Hoechst will merge with France's Rhône-Poulenc Inc. A deal could be announced soon,

SIEMENS

Pressure from CEO Heinrich von Pierer announced in March that he will divest \$10.2 billion in businesses, including the chips unit.

BRITISH AIRWAYS

Its alliance with American Airlines recently unraveled, and its share price is half what it was a year ago. Some institutional investors question CEO Robert Ayling's leadership and strategy.

ALCATEL

Serge Tchuruk issued a profit warning in September. Now, Alcatel is being sued by angry shareholders of DSC, the Texas company Tchuruk bought two weeks before he announced the problem.

BAAN

After a \$43 million earnings hit this spring, the Dutch software maker's stock plummeted, shareholders began probing murky accounting, and CEO Jan Baan stepped down in July.

with assets of more than \$126 billion, is on the verge of announcing alliances with local investors in Britain, France, Germany, and Japan. CalPERS has nearly doubled its international equity holdings since 1995, to \$22.8 billion in 1998. So it wants to participate in efforts to boost shareholder value in the biggest foreign markets where it has holdings.

In January, CalPERS announced that it would invest \$200 million in London-based Active Value Capital, a small fund that targets underperforming companies and aims to shake them up. Active Value Capital has successfully taken on such British companies as footwear maker Scholl, whose chairman was ousted and whose stock price has since risen steeply.

While Active Value Capital's managers don't flinch from confrontation, Hermes Lens Asset Management fund, launched on Oct. 1, takes a different approach. Giant British pension fund Hermes teamed up with well-known U.S. shareholder activist Robert A.G. Monks, who has waged war on such American underperformers as Sears, Roebuck & Co. "We are able to talk to companies behind closed doors and have a significant impact, especially when we coordinate with other shareholders," says fund CEO Peter Butler.

U.S. EFFECT. At least some European companies are getting the message. Like Germany's Hoechst and Siemens, former monopoly Telecom Italia has responded to shareholder demands—and watched its stock recover. The telecom giant last month replaced Chairman Gian Maria Rossignolo with turnaround artist Franco Bernabè. All eyes are on Bernabè, who made troubled oil giant ENI efficient and profitable, to work the same magic in his new job.

Of course, companies that have raised money in the U.S. or merged with an American company are quickly getting in line with Anglo-American practices. DaimlerChrysler is setting up a performance-related pay scheme unlike anything seen in Europe before. And a new generation of European managers recognize that unless they make shareholder value a priority, raising capital will be tough for them in the future. Plenty of European companies still don't get it. But the cozy world in which European managers could shrug off investors' concerns without feeling the consequences is fast disappearing.

By Julia Flynn in London, with Thane Peterson and Karen Lowry Miller in Frankfurt, William Echikson in Brussels, Gail Edmondson in Paris, and bureau reports

A SHAKEN LEADER AT PHILIPS' HELM



TARNISHED: Boonstra's credibility is at risk

Of all the European chief executives on the hot seat recently, none has come under greater pressure than Royal Philips Electronics CEO Cor Boonstra. In the past month, he has stirred controversy by pulling the plug on a mobile-phone venture with Lucent Technologies Inc. and announcing the closure of one-quarter of the company's 230 factories worldwide.

Those moves have come just as Boonstra grapples with personal troubles. First there was his public liaison with Sylvia Tòth, 54, one of the Netherlands' richest women. Well-known in society, she made her fortune by founding and later selling the temporary-work company Content Beheer. Boonstra's high stepping, heavily reported, ranked Philips old-liners. Far graver, on Nov. 13, thugs broke into the Boonstras' chateau in Belgium and abducted his estranged wife, Hansje Boonstra-Raatjes. They later left her bound and beaten south of the Hague. Police are probing if the attack was an act of vengeance against Boonstra or Philips.

Now rumors are

swirling that the 60-year-old may step down. Philips denies it, saying only that Boonstra is "extremely upset." Still, he recently said he plans to retire in two years—earlier than expected in a company without a mandatory CEO retirement age. There's no doubt the blows to Boonstra have left a shaken leader at the helm of the electronics giant. Boonstra refused to be interviewed for this story.

STOCK FALL. If Boonstra is to lead the long-awaited Philips turnaround, this is his time. In his first two years as CEO, he has made dramatic changes—unloading Polygram Records, for example. But there has been no payoff. Operating earnings are expected to be down 3% this year, to \$1.3 billion on \$38 billion in sales. And the stock has fallen 40% since its July high.

Boonstra faces plenty of opposition. At headquarters, people close to the company say, execs grouse about him pushing them for returns while cell phones post a \$525 million loss this year. Traditionalists still object to the former Sara Lee exec as an outsider. They resent that he moved the company from Eindhoven to Amsterdam. And a former CEO, Wissam

Dekker, called Boonstra's behavior "un-Dutch."

As Boonstra recovers, he'll have to mobilize his team for tougher missions. Now, probably the most he can hope is to nudge Philips down the road toward success. It's likely to be a far cry from the transformation he intended when he started.

By Stephen Baker in Paris and William Echikson in Brussels



SOCIALITE: Close friend Tòth

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BREAKING THE PLASTIC MOLD.SM

CITIBANK

CHINA

SO MUCH FOR COMPETITION

Beijing slaps on price controls to stanch deflation

Shifeng Group, a northern Chinese manufacturer of farm vehicles for the huge rural sector, had high hopes after beating out rivals and becoming the largest producer in China. Its goal was to sell 600,000 vehicles and reach \$300 million in sales this year. But regulators in Beijing had other plans. They slapped state-owned Shifeng with a \$110,000 fine and forced it to scale back production by 50%. The crime: The efficient producer was selling its products

too cheaply—about \$30 cheaper than its competitor's \$700 price. "If everybody continues selling their products so cheaply, that will mean a major loss of state capital" and lower tax revenues for the government.

Deflation coupled with slower economic growth is a growing problem. October saw a 2.9% drop in prices, the 13th straight month of decline. Cheap imports from the rest of Asia are washing up in

up production in hopes of grabbing port markets in the region. But with Asian economic crisis, China now finds itself with far too many TV production lines. Industry leader Sichuan Changhong Electronics Co., for one, welcomed efforts to halt price-cutting. It has reported its suggested prices to the price bureau of the State Economic Trade Commission, which will soon set price minimums. Gong Yu, director of Changhong Electronics' pricing department, complains that competitors are selling their 35-inch color TVs for around \$500, up to 40% less than Changhong. "It's a vicious competition and could trigger a financial crisis for China," he says. "Everyone is losing money, and many enterprises won't be able to pay off loans to banks."

China's sugar industry likewise finds itself with mountains of oversupply. I

THE PRICING DILEMMA

THE PROBLEM

Overcapacity in many industries, falling consumer demand, and a flood of cheap imports are setting off price wars across China

THE THREAT

Lower prices are causing deflation, putting pressure on Beijing to devalue the yuan, and could put inefficient companies out of business, creating more unemployment

THE SOLUTION

Set minimum selling prices in 21 industries, ranging from sugar and glass to TV sets and autos

THE RISK

The controls will be difficult to enforce and are likely to delay much-needed industrial reform



too cheaply—about \$30 cheaper than its competitor's \$700 price.

It's not just farm equipment. Beijing officials worried about the Chinese economy are now setting minimum prices in 21 industries, ranging from electronic appliances to sugar processing. The aim is to stop the price wars that threaten to destabilize Chinese industry, particularly state-owned enterprises.

SMUGGLED GOODS. The policy shift smacks of communist-era controls. Not long ago, China's leaders were praising competition as a means of weeding out the most inefficient companies. But now they claim that by tinkering with prices and blunting competition, they can keep employment from rising and stave off political problems. "Many state enter-

prises are losing money," says Men Xiaowei, an official at the State Economic & Trade Commission. "If everybody continues selling their products so cheaply, that will mean a major loss of state capital" and lower tax revenues for the government. Deflation coupled with slower economic growth is a growing problem. October saw a 2.9% drop in prices, the 13th straight month of decline. Cheap imports from the rest of Asia are washing up in

China's markets, adding to deflationary pressures. And while Beijing is trying to beat back rampant smugglers, such low-price goods are adding to price pressure. Economic growth, forecast at 8% this year, is unlikely to meet that target—meaning that the Chinese economy will fall short of its job-creation goals. Unsold inventories are adding to the woes. Ailing state enterprises keep cranking out products they can't really sell. As a result, some \$500 billion worth of goods, totaling 55% of gross domestic product, is piling up in warehouses.

battered by **PRICE WARS** China's TV production industry now has too many production lines and costs that are too high, the industry will set minimum prices in late November. Sugar costs per ton to process in China, while wholesale prices have slid below \$320, matched losses for the industry hit \$1 million last year, says one official. Guangxi Sugar, Tobacco & Wine. Now, with the recent bankruptcy of one of China's largest producers, Acheng Mill, which went under with debt of \$85 million, the price policy has taken on a particular urgency. "The whole industry has been dumping its products," says the Guangxi official.

China's car industry is in almost

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bad shape. With more than 100 producers scattered across the country, China has capacity estimated to be twice this year's output of 1.6 million vehicles. Growth in auto sales has fallen from what in recent years often exceeded 50% annually to an estimated 4% for this year, say industry analysts. And rampant smuggling is believed to have brought in more than 100,000 cars last year. The car glut touched off a price war earlier this year, with China's foreign automobile manufacturers dropping sticker prices by as much as 20%. "That's crazy. We couldn't continue like that," says the head of the Beijing office of one Western auto maker in China. Yet companies like General Motors Corp. are still plunging ahead with billion-dollar investments, despite cars being more expensive now in China than in the rest of the region.

BARTER. In response to the price wars, the State Economic & Trade Commission (SETC) announced in late October that China's top 13 auto manufacturers would now follow Ministry-set minimum prices. Despite concerns about Beijing bureaucrats taking over price policy, most manufacturers seem pleased with the props. "If everyone cuts their prices, everyone loses," says Zhang Suixin, chief representative of the Beijing office of Volkswagen, which dominates China's car market through a Shanghai-based joint venture. Regardless of whether they agree, car manufacturers are legally bound to follow the new rules.

Even so, Beijing may have some trouble making the rules stick. Many car-makers are now so strapped that they end up paying their suppliers in cars rather than cash—using barter—which is estimated to total some 20% to 30% of business today. That means even less control over final prices, as cash-hungry suppliers unload vehicles cheaply into the already saturated market.

And lack of unanimity among Beijing policymakers may allow some cracks in the new directives. While the SETC fully backs price controls, officials at the State Development & Planning Commission (SDPC) are strongly opposed, saying that controls are anticompetitive. "The outcome of price controls is to protect the backward and frustrate the advanced," a vice-director at the SDPC was quoted as saying in the official *China Daily*.

Such backroom discord among Chinese policymakers is sure to confuse foreign investors and Chinese businesses alike. But until Chinese policymakers can step up growth and whittle down excess capacity, the deflationary spiral will continue—and so will the meddling.

By Dexter Roberts in Beijing

COMMENTARY

By Mark L. Clifford

TOUGH LOVE: JUST WHAT ASIA NEEDS

Participants knew the latest Asia-Pacific Economic Cooperation summit in Kuala Lumpur would be tense, given the stresses of Asia's crisis and the turmoil in Malaysia, this year's host. But no one quite expected U.S. Vice-President Al Gore to lob a hand grenade into the proceedings. At a banquet on Nov. 15, Gore lauded the "brave people of Malaysia" in their struggle for reform. It was a direct slap at long-serving Prime Minister Mahathir Mohamad, who recently sacked his reform-minded deputy, Anwar Ibrahim, and put him on trial. Gore's speech came perilously close to calling for Mahathir's overthrow.

The howls of outrage have yet to subside. Malaysian Foreign Minister Abdullah Badawi attacked Gore's speech as "gross interference in the internal affairs of the country," calling it a "brazen violation" of international norms. The Malaysians drew an unlikely voice of support from New Zealand Prime Minister Jenny Shipley, who called Gore's speech "megaphone diplomacy."

Ultimately, Gore's act made sense. It sent a clear signal that the U.S. has decided that only "tough love" in Asia can result in stronger, healthier trading partners. Now, Washington needs to exploit this episode to get meaningful things done.

RUDE SPEECH. Gore's statement was rude, even hostile. It had an element of grandstanding from a presidential candidate who can act like a crusader for democracy at little cost.

Malaysians may be enraged, but they don't vote in U.S. primaries. While the U.S. has called for greater

democracy in Asia for decades, many argue frontal attacks only make intransigent leaders dig in their heels.

But the speech may do more good than harm. The U.S. delegation to APEC had to take a strong stand. Otherwise, Asians would have concluded that the U.S. puts expediency before reform. Gore has also single-handedly turned APEC—until now, an ineffectual

talk shop—into a potentially valuable forum for Pacific Rim nations. Maybe other participants at future APEC conferences will now speak their minds.

Ironically, Gore gave Asians just what they've been asking for: strong vision from the U.S. The crisis, traumatic as it is, presents an opportunity for change. Now that the cold war is over and Asia has lost its swagger, Washington can put forward an agenda of political and economic freedom. Gore signaled other ways the kind of Asia policy the U.S. wants. He also unveiled a \$10 billion U.S. and Japanese support package, but made it clear that

cash would only come in exchange for deep reforms of regional banks.

U.S. policymakers have to follow up with more substantive action. The \$10 billion is a start. But overhauling entire financial systems takes a sustained effort. It means helping train a cadre of specialists. It means helping build a free press and impartial courts—and convincing entrenched rulers that democracy yields payoff. And that will cost a lot more than the Vice President's speech let on.

Correspondent Clifford covers Asian economies from Hong Kong



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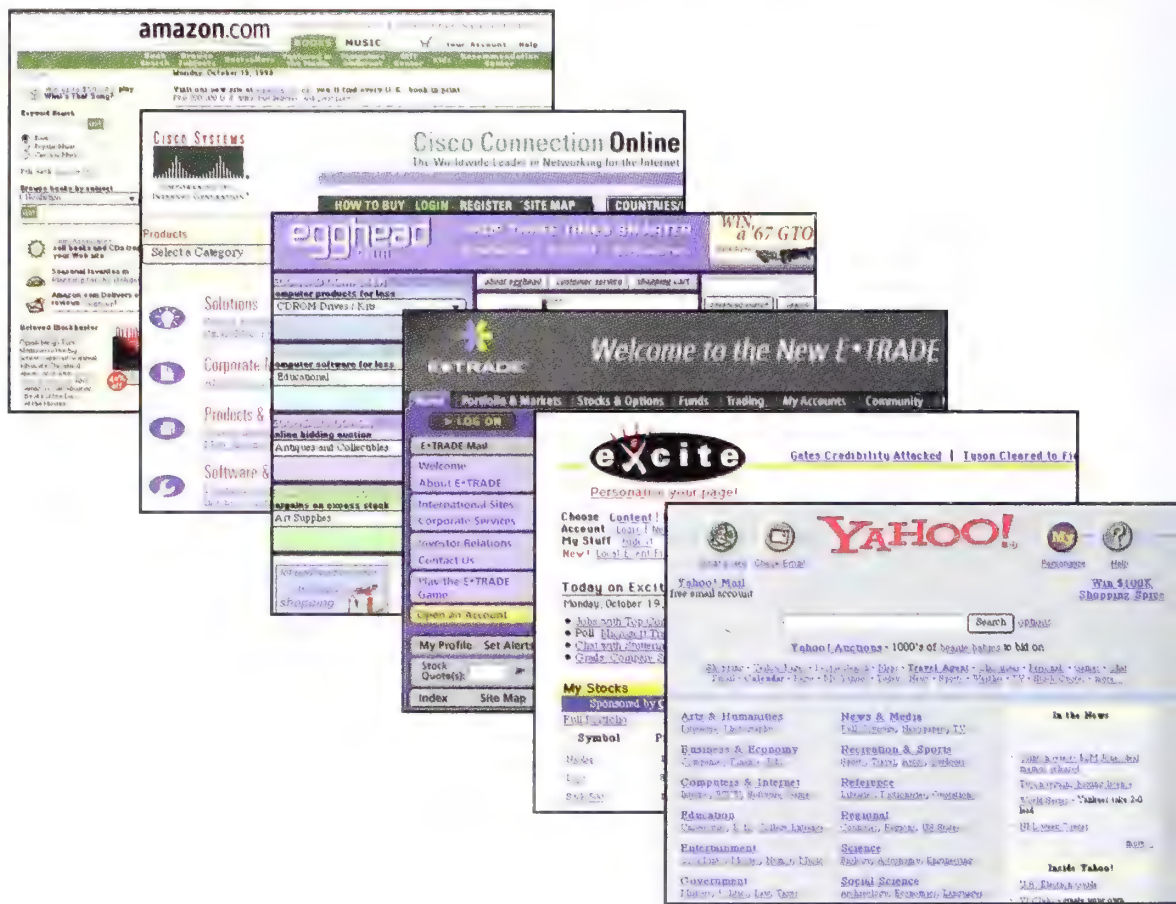
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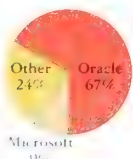
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TEDE BY JOHN TEMPLEMAN

HOW EUROPE'S RIGHT CAN FIND ITS WAY OUT OF THE DESERT

After years in the political desert, Europe's left is firmly back in power. Riding the coattails of Britain's Labour Prime Minister Tony Blair, they won by ditching Socialism and occupying the political center. So complete is the victory—they govern in 13 of the 15 European Union nations—that right-wing parties from France's Gaullists to the British Tories look as sidelined as the left once did.

Lefty strategists on the right look longingly upon the rebound of America's Republican Party. So far, no European version of the Contract with America is in sight. Nor is another Thatcher-style revolution likely to emanate from Britain's demoralized Conservative Party any time soon. Leader William Hague vows to retake the center—but he's building a myopic Little England party whose main policy is an anti-European stance.

COMPETENCE. Desperate as the right's situation may seem, it is not hopeless. The left won by pledging to slash double-digit unemployment rates. But their policies of income redistribution and Keynesian deficit spending won't alter the goods, especially if the global economy falls into recession. Besides, massive industrial restructuring sparked by the arrival of the Internet on Jan. 1 will snuff out jobs and endanger governments. "Elections are no longer about ideology but the competence of political leadership," says Philippe Moreau Defarges, a consultant at the French Institute for International Relations in Paris. Surprisingly, Germany's Christian Democratic Union, the victim of Europe's pink tide, may have the best chance of reversing it. Defeated Chancellor Helmut Kohl quickly stepped aside to make way for a new CDU leader—Wolfgang Schäuble, a brilliant tactician who led the party in the 1980s. Since the Social Democratic Party's Sept. 27 victory, Chancellor Gerhard Schröder's government "has made

lots of mistakes already," says Ulrich Schröder, an economist with Deutsche Bank in Frankfurt. Proposed reforms to finance modest personal tax cuts by raising tax burdens on companies, for instance, have alienated the business community. Rolling back Kohl's limited social security reforms, such as restricting sick pay, will also add to costs and dim chances of an upsurge in jobs.

Unless the pragmatic Schröder quickly asserts control over the SPD, led by his old-line Socialist Finance Minister, Oskar Lafontaine, the new cohort of young, reformist CDU leaders that Schäuble is promoting could have a much easier job than they expect. Besides, Schröder's government is an uneasy coalition with the Green Party, promoter of vote-killer ideas such as further increasing Germany's sky-high gasoline taxes.

"INTELLECTUALLY PREPARED." France's center-right is hobbled by aging leaders who refuse to budge. Although President Jacques Chirac and others launched the Alliance for France in June to weld splintered center-right parties into one, he hasn't quelled internal rivalries. Some leaders even partnered with the extreme right National Front to win local election runoffs earlier this year.

Judging by Spain's center-right Popular Party, that's the wrong route back. The party leader, President José María Aznar, molded himself in Blair's image to topple his Socialist rivals in 1996. He projected his party as competent to manage strong economic growth but still sensitive to social issues ranging from pensions to labor reforms. "They are doing a good job," says José María Pujol Artigas, president of auto-parts maker Ficosa International. "They are prepared intellectually and professionally." That's what the rest of Europe's right still needs to do.

By Gail Edmondson in Paris, with Thane Peterson in Frankfurt and Margaret Popper in Madrid



SCHAUBLE: Tactician

GLOBAL WRAPUP

EARLY VOTE IN TURKEY?

The year-old secular government of Turkish Prime Minister Mesut Yilmaz may be forced into early general elections. The Prime Minister is accused of helping a businessman with mob connections gain control of Türkbank's recent privatization. Yilmaz denies the allegations. But they have won enough support to force the government to face censure motions from two opposition parties and the Republican People's Party, which normally supports Yilmaz. Yilmaz is trying to stay in power,

at least until parliament has approved his 1999 budget in late December, to improve economic stability ahead of elections scheduled for April. But now, Turkey faces the prospect of early elections that are likely to produce another rickety multiparty government.

TOURISM IN NORTH KOREA

► Cash-strapped North Korea could earn big money from the 10 million South Koreans eager to visit the land of their birth. Hyundai, the Seoul-based *chaebol*, started running \$2,400

cruises to the North in mid-November and pays Pyongyang a fee of \$300 per head. It will also spend \$1 billion to develop Diamond Mountain, the cruise destination, as a resort.

But Pyongyang isn't courting tourists with the usual siren songs. It has told them they face fines up to \$4,600 if caught littering, igniting fires, pocketing rocks or plants, or urinating in public. With Hyundai warning them not to discuss politics or complain about communist slogans daubed on scenic rocks, only the hardest returnees are booking the cruises.

JAPAN



死をひきまく巨大怪獣
もう誰も...
ヤツを止められない!

SPECIAL REPORT

WANTED: A NEW ECONOMY

n Japan, truth comes in several forms. There is the polite truth—the version of reality that one presents to strangers, and the less public truth that a Japanese shares with his intimates. Perhaps a Japanese many will proclaim all is well, while executives negotiate with creditors for loans. No one thinks this violates code of honor: As long as the executives are free to retail another version of the truth at large.

What if someone does not even know the private truth really is? In that case the system loses its moorings. This condition prevailed at the highest levels of government a few weeks ago, when the ruling Liberal Democratic Party was cobbling together the bank rescue. Prime Minister Keizo Obuchi could not get the banks to spell out the size of the problems.

When the U.S. and Europe, officials would have called in the bank chiefs and grilled them. But this is Japan, where another's truth is not challenged directly—only indirectly. So, as investors waited for Japan's economy to collapse, members of Prime Minister Obuchi's brain trust, the Economic Policy Council (EPC), started tapping a network of anonymous sources within Tokyo's Ohtemachi financial district. The truth started trickling back, and it was no longer a secret. Despite their chiefs' denials, most top money-center banks were nearly bankrupt. And the official estimate of \$600 billion in problem loans was a farce: The total was almost \$1 trillion. Terrified, LDP negotiators drafted a \$500 billion rescue plan through the Diet. "The situation was very strange," says Iwao Nakatani, an economics professor at Hitotsubashi University and an EPC member.

Simple, but telling. In just the past few months, the Japanese have embarked on a startling process of rooting out nastiness about their system. Just a short time ago, no one would have acknowledged that the Japanese model was fundamentally flawed. Now, bookstores are full of titles such as *Meltdown*, *The Great Crash*, and *The Extinction of Yen Assets*. The fears run down to office temps waiting to be dismissed, housewives

MODEL

scrimping as their husbands see wages cut, and students dreading an unemployed future. Half of those polled recently by the Bank of Japan felt this was the worst recession in living memory. They doubted companies could protect their jobs and feared a fiscal crisis triggered by an aging populace.

ANG ROT. Even the government's latest moves have a whiff of panic about them. On Nov. 16, Obuchi revealed a package of \$200 billion in new tax cuts and public works spending—about 5% of gross domestic product—all to stave off depression. Investors took the package as a sign that the functional economy needed more life support.

The vaunted corporate sector is also showing the rot. At the end of 1998, the Japanese could comfort themselves that

THE PILLARS ARE CRUMBLING

KEIRETSU

They used to provide cheap capital, steady management, reliable partners, and friendly shareholders for big Japanese companies. But the system has dulled Japan Inc.'s competitiveness and created unsustainable levels of debt.

JOBS FOR LIFE

This doctrine produced a hard-working and passive labor force. Now, it's strangling companies that need to restructure and locking in layers of management that block innovation.

THE MINISTRIES

In Japan's statist capitalism, bureaucrats channeled resources into export industries that boomed for years. Now, they have to deregulate the consumer economy to prevent a slide into depression. None of the bureaucrats is trained for the task.

their flagship manufacturers remained secure from meltdown. But Hitachi Ltd. and Toshiba Corp. are showing their first losses since the war. Nissan Motor Co., the second-biggest carmaker, can barely service \$20 billion in debts and is asking the state-owned Japan Development Bank for \$820 million in credit.

The tottery state of big companies means that to keep the economy alive, exports must rise fast, at the risk of boosting the U.S. trade deficit to \$400 billion. Policymakers at the Ministry of Finance (MOF) are telling U.S. and European counterparts that, even with the stimulus program, the transition to a stronger economy will take two years, so only West-bound exports can keep factories humming. This admission stems from another failure: Planners thought tethering Japan to Asia with exports and investments would guarantee growth for years. The crisis shattered that plan.

PESSIMISM. Skeptics would say there is nothing new. Public works have always figured prominently in LDP rule. And the Japanese have always had excuses to ramp up exports. Yet something is profoundly different about the latest cycle, and it's not just the level of pessimism. It's also the mounting evidence that the institutions that built Japan Inc. can no longer deliver growth and prosperity. From the tightly connected companies called *keiretsu* to the once-infallible MOF, the pillars of the system are crumbling.

Gloomy stuff. But the Japanese are drawing on their disillusionment to start

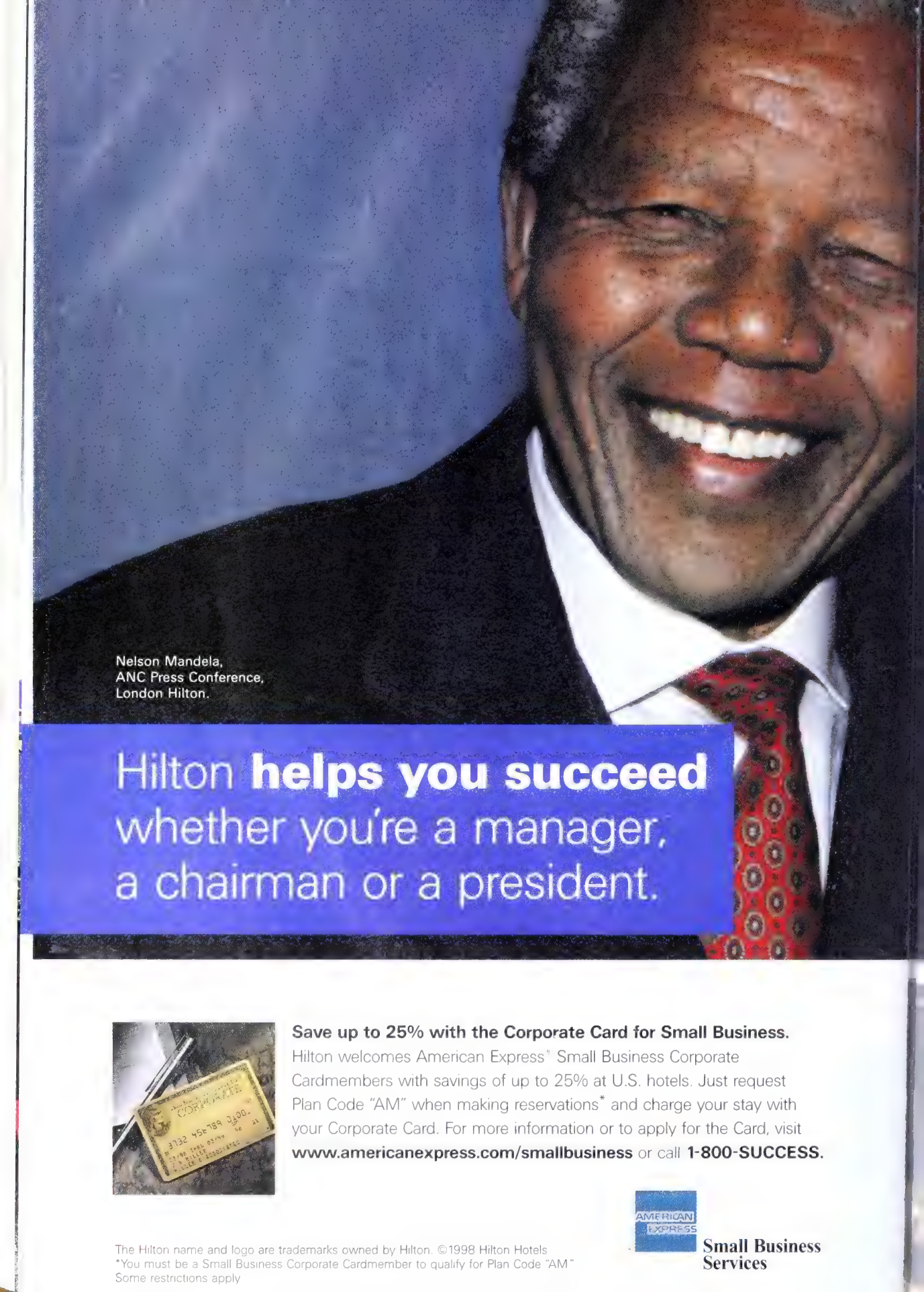
a healthy debate on what comes next. Many of the ideas are startling. Policymakers and corporate chiefs are saying the debt-laden *keiretsu* will have to slim down dramatically. Others are assessing the impact of mass layoffs. Economists think billions in public works must be shifted from the countryside—the LDP stronghold—to the cities, which need fiber-optic systems and other hardware of the networked age.

Leaders in the debate are the members of the EPC, a group of top executives and academics set up by Obuchi. The council wants to roll back government's role in everyday life and bring Japan up to global standards of transparency and efficiency. One member, radical economist Takatoshi Ito of Hitotsubashi University, thinks only complete abolition of most economic regulations will save Japan. That's why many in the LDP lobbied to keep him off the EPC.

Other figures, such as the influential Minister of International Trade & Industry Kaoru Yosano call for a harsh U.S.-style liberalization of Japan's distribution, energy, and finance industries, coupled with a European-style national job-retraining program. "People have to accept some economic pain," he says, but "the European approach toward unemployment is very good."

Another plan is to create the kind of high-consumption economy that could sustain a vibrant service industry. Vice-Minister for International Finance Eisuke Sakakibara is calling for another Rebuilding the Japanese Archipelago campaign. The first one, led by Prime Minister Kakuei Tanaka during the early 1970s, transferred huge sums to the countryside for bridges and highways and created a corrupt nexus of politicians and construction companies.

The second such campaign would focus on liberating consumer spending through broad expansion of the housing



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stock and lifestyle-oriented public investments. And, yes, that would involve more risk-linked private and government investment, plus a far bigger presence of foreign companies. "We have to plow our excess [funds] into domestic spending," says Sakakibara.

There would be a huge human cost to such change. Keio University economist Heizo Takenaka, also a member of the ESC, figures that, on top of the 3 million already unemployed, an

Special Report

additional 6 million to 7 million surplus workers are being carried by Japanese companies. "Nearly 10 million will probably need job retraining," Takenaka says. That means one in every six workers.

Yet planners at the Ministry of International Trade & Industry (MITI) think that drastic deregulation would transform such fields as logistics, distribution, energy, information, finance, and telecommunications along U.S. lines, and so would push up GDP by 6% over a five-year period. More jobs would be created to replace the ones lost. Consumer prices would drop dramatically. And ordinary Japanese might finally enjoy the living standards that have always been denied them.

To expect a groundswell of support for such change would be like asking U.S. auto workers a decade ago to demand that General Motors Corp. fire them for the good of the country. So Tokyo officialdom must sell a program of wrenching disruption to a society that cherishes harmony and expects unending handouts. Nobody has the nerve to deliver the message yet. But so many fault lines are emerging that maybe the message will become self-evident.

The fault lines start at the top. The LDP is still pretty much run by the generation that rebuilt postwar Japan. Kenichi Ohmae, former partner at consultants McKinsey & Co. in Japan, thinks this age group is still pining for the glory days. "It's almost like after the battle of Midway," he says. "Everybody thought we were still winning the war." Yet plenty within the LDP are agitating for wholesale changes. They include a younger set, such as former Bank of Japan official Yasuhisa Shiozaki, 47, who fell out with Miyazawa on bank reform. Junichiro Koizumi, 56, advocates selling off the state-run Postal Savings Service to

INTERNECINE STRIFE. With the political dissent comes an outbreak of internecine strife in Japan Inc. The casualties are mounting. Banks are cutting off smaller companies right and left. In October, new bank lending fell 3.3%, the biggest year-on-year drop since the Bank of Japan has been keeping records. Hence, the devastating run of bankruptcies recently. Strains are showing even inside the sprawling *keiretsu*. Years ago, Western academics marveled at Japan's consensual capitalism, where borrowers took equity positions in banks to ensure a steady flow of low-cost, patient capital.

But today, many of these companies are dumping their cross-shareholdings to free up badly needed funds, and they are renege on alliances with weaker partners. At the start of the decade, roughly two-thirds of

the stock market's tradable shares were locked up in *keiretsu* networks. Now, it's less than 50% and falling fast. At the powerful Mitsubishi Corp., Chairman Minoru Makihara thinks *keiretsu* equity networks are a waste of precious capital. For him, looking for alliances or credit outside of the group is no longer an act of corporate treason. In fact, Mitsubishi's biennial Friday Night Club meetings of top executives, once tense strategic sessions, have turned into social gatherings. "We discuss a few things unrelated to business and then off to dinner," he says.

"A SEA OF RED INK." Some of the banks are also trying to distance themselves from this self-destructive system. Fuji Bank Ltd. has long been at the center of the Fuyo *keiretsu*, which includes Nissan and Canon. Now, the bank's portfolio is bulging with bad debt, much of it owed by Fuyo companies. But in a move of surprising candor, Fuji Bank is opening up its books to public scrutiny. And President Yoshiro Yamamoto is seeking clients and allies based on their performance—not their *keiretsu* links.

Thus in May, Yamamoto approached Dai-ichi Kangyo Bank about a joint takeover of Yasuda Trust's pension-management business. "Japan's current pension system is on the verge of

collapse," says Yamamoto, who sees a big business in helping companies meet their obligations to employees. Yamamoto also hopes to clinch a tie-up with a Western investment bank. He foresees a big market in buying and selling *keiretsu* assets as the groups restructure.

The banks are also attacking their lot at the MOF. For years, the banks would channel cheap loans to the MOF's favorite companies, secure in the knowledge that the government would discreetly bail them out in case of trouble and never ask the tough questions that might trigger an investor panic. But now, investors assume the worst about the bank sector, so there's no reason for banks to cater up to the MOF.

Instead, the banks now consider the MOF as Enemy No. 1. It's the MOF that runs the \$2 trillion Postal Savings Service, the world's biggest bank, which competes directly with commercial banks for depositors' funds. The banks' trade group is backing calls to privatize the postal bank to deprive the MOF of its power. Meanwhile, critics are assailing the MOF for its policy calls in running the economy.

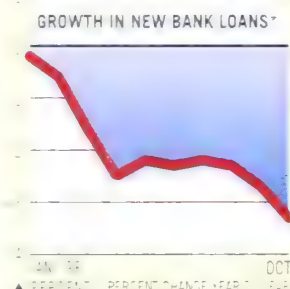
Deregulation initiatives are adding to the pressure. Japan's skies, for example, are getting less friendly. Two discount carriers, Sky Mark Airlines and Hokkaido International Airline, will soon start flying. Both are offering ticket discounts of 35% to 50%. Now, Japan Airlines Co. and All Nippon Airlines have to match these fares and wring out costs. Says Japan Airlines President Isao Kaneko: "If we can't be competitive, we may fall into a sea of red ink."

Thus are market forces pushing their way into the system. If companies have to come for capital, chief executives will get more serious about cost, profit growth, and manageable debt. If job security isn't such a thing, then maybe corporate loyalty won't be either. A more dynamic environment may seed the growth of the next Sony Corp.

That promising vision lies within Japan.

JAPANOPHOBIA: THE BAD NEWS ABOUT THE ECONOMY

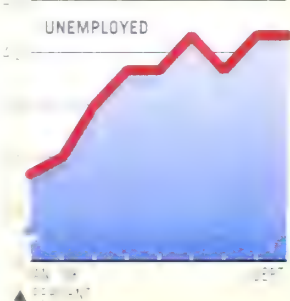
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sp. Yet without reform, Tokyo will face a far more complex systematic crisis early next century, when the burden of aging populace stretches the nation's financial resources to breaking point. Japan's best companies and its young nt will steadily migrate out of the country, and the bank-crisis will become permanent. "I can't imagine we can sus- the current system for another 10 years," says Minoru i, president and chief executive of Mori Building Co. and ESC member.

an unreformed Japan will just keep building up trade sur- es so big that they destabilize the world economy. Seeking er yield, the Japanese have invested much of the surplus U.S. Treasuries. But a big chunk of this capital also fueled

the speculative bubbles, overcapacity, and foreign-debt bur- dens that sent East Asia into crisis. If the Japanese cannot in- vest more of their money prudently at home, then the risk of more bubbles is high.

It's a mind-boggling challenge. Former McKinsey strategist Ohmae thinks the rul- ing elite should draw inspiration from Japan's twentysome- thing generation of Nintendo kids. "These young people know that, when things don't work, they hit the reset button," he says. A nice metaphor. If only it were so easy.

Special Report

By Brian Bremner in Tokyo

COMMENTARY

By Robert Neff

A MAJOR ROADBLOCK TO REFORM: THE U.S.

When asked who really runs Japan, the Japanese man- agement guru Kenichi Ohmae sometimes answers: "The United States." It's more than a glib remark. A strong argument can be made that Japan can't and won't change in the way the U.S. publicly demands because of the very nature of the two countries' interdependence. Ironically, moreover, the U.S. in some ways is shielding Japan from pressure to change.

Since World War II, Japan has served essentially as a U.S. vassal state. The U.S. has provided most of Japan's defense, aided its foreign policy, and thrown open American markets to its ever expanding export machine. The vassal has provided the U.S. with key strategic products ranging from semiconductor-production equipment to super diodes while recycling its billions into the American economy. If Japan got into serious trouble, the U.S. would rescue it. And despite howls from industry, Washington would let Japan's trade surplus soar further.

THE FIX. The reality is that Japan's economy, the world's second-greatest, has become too important to fudge with. Thus, in 1995, when a surging yen put seemingly life-threatening pressure on Japanese exporters and banks, the U.S. Treasury Dept. teamed up with Tokyo to intervene massively in foreign-exchange markets. Just last month, asury, the U.S. Federal Reserve, and the Ministry of Finance acquired in a market-driven strengthening of the yen. Had the yen kept



CLOSE LINK
Since World War II,
Japan's economy
has become too
vital to the U.S. to
tamper with

would have been vicious.

Washington hasn't acted out of pure altruism. After the 1995 intervention, a weaker yen meant the U.S. didn't need to raise interest rates, averting pre-election recession. And by easing pressure on Japan's financial system, the U.S. helped protect the largest buyer of Treasury bonds. In 1998, October's yen rise satiated U.S. industry demands for curbing cheap Japanese imports.

Thus are Japan and the U.S.

sliding, it would have impaired Japan's ability to raise money overseas and further depressed its economy. China would have had to devalue, and the fallout

caught in a fatal embrace. "The U.S. borrows from Japan to buy imports, and Japan's exporters use the profits to build more capacity to sell to the United States," says Clyde V.

Prestowitz, president of the Economic Strategy Institute, a Washington think tank. "Any breakdown in the flow threatens the global economy." That's because loss of Japanese funds would likely force interest-rate hikes in the U.S. and crimp global liquidity. So despite Washington's rhetoric, the U.S. can only go so far in prying change out of Japan. "If Japan did what the U.S. says it wants Japan to do, there would be tremendous economic upheaval in Japan," says R. Taggart Murphy, author of *The Weight of the Yen*.

The U.S. has, of course, extracted many reforms and concessions from Japan over the years. But they have been piecemeal. Japanese leaders, used to being led by the nose by bureaucrats, lack the expertise to do the bureaucrats' work. And the MOF is so weakened by recent scandals and its economic mismanagement that it is afraid to do anything. Besides, Japanese elites know the score. "There is not a single official in the MOF who knows a world where the U.S. doesn't bail out Japan," says a former vice-minister of finance. Blame for Tokyo's failure to deal with its globally debilitating recession and banking crisis doesn't only rest with its paralyzed decision makers. It is shared by Washington's readiness to keep Japan Inc. in business.

Neff is a contributing editor based in Japan.

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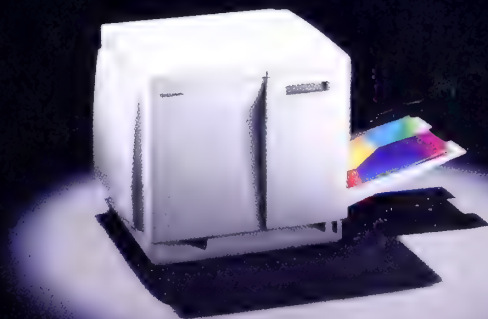
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BRIGHT SPOT
Fujitsu flat-panel displays light up the New York Stock Exchange

loss next May. Even Sony Corp., which posted record profits in 1997, expects pretax profit for the full year to sink 62%.

The contrast with the U.S. couldn't be more stark. Just as at market capitalization. Between 1995 and 1997, the value of America's top information-technology companies soared 300%, according to merger-and-acquisition investment bank Broadview International in Fort

N.J., from \$230 billion to \$915 billion. Market cap for Japan's top companies in this sector actually dropped 5% over the same time, from \$380 billion to \$360 billion, Broadview reports.

Although the specifics vary, all Japan's major electronics players are struggling with similar challenges: bloated payrolls and bureaucratic management hierarchies, severe price erosion in consumer markets, and a flood of new, drop-dead products that are squeezed out from the noise.

But the worst is yet to come. With the financial sector stagnating and consumer confidence at an all-time low, Japan's domestic economy may shrink 2% this year. In Korea and Southeast Asia, meanwhile, recession has squelched demand for Japanese electronic components and capital goods. Without that outlet, Japan's electronics makers have little hope of exporting their way back to health.

"SCRAP AND BUILD." Now, for the first time, economists are discussing the possibility of bankruptcies among blue-chip *sogo* manufacturers—vertically integrated electronics giants like Toshiba, Hitachi, and Mitsubishi, that do everything from chips and batteries to power plants and automated assembly plants. "The old system isn't working, we have to scrap and build," says Masahiro Akutsu, a senior researcher at the Mitsubishi Research Institute and author of several books on the industry. "For that to happen, we need some failures among the *sogo* companies." Unlike Japan's ailing banks, electronics giants aren't consid-

HIGH-TECH GIANTS ON THE ROPES

They're getting pummeled by price erosion, shrinking markets, and smaller, nimbler outfits

Hidetaka Yamamoto, a computer engineer at Toshiba Corp., heads an elite product development unit with a long list of achievements. Backed by an annual budget of \$100 million, his group helped create Toshiba's hit digital videodisk (DVD) players, its Libretto notebook PCs, a clever interac-

lion.) Now, to cut costs, Yamamoto is slashing the number of projects by two-thirds and reducing his staff of 130 by nearly half. "We've just started to develop a new business," he laments. "But in the current climate, we have to be profitable or die."

It's a lament heard all across Japan's high-tech landscape. Fierce competition has stripped away profit margins on most consumer products—even glamorous new gizmos such as DVDs. Foreign companies, led by Microsoft, dominate personal-computer software and networking. Japanese giants still have a tight grip on big-ticket items such as electric power plants, high-speed trains, and mighty mainframe computers. But after six years of economic funk, demand for these products has shriveled.

That has taken a toll on heavy industrial suppliers and gadget makers alike. Hitachi Ltd., the tech sector's biggest basket case, slid \$1.03 billion into the red for the first fiscal half. The loss could double by the time Hitachi closes its books on Mar. 31, 1999. Fujitsu Ltd. and Mitsubishi Electric Corp. are struggling to eke out slim profits, while NEC Corp. will probably show a

Special Report

tive TV scheme, and two dozen other digital offerings.

These triumphs have generated a lot of buzz inside Toshiba. There's just one small blot on Yamamoto's record: None of the products cascading from his unit has contributed a penny in profits to Toshiba, whose Japan operations just posted a \$53.3 million loss for the first half of fiscal 1998, ended last September. (Revenues were down 12%, to \$11.9 bil-



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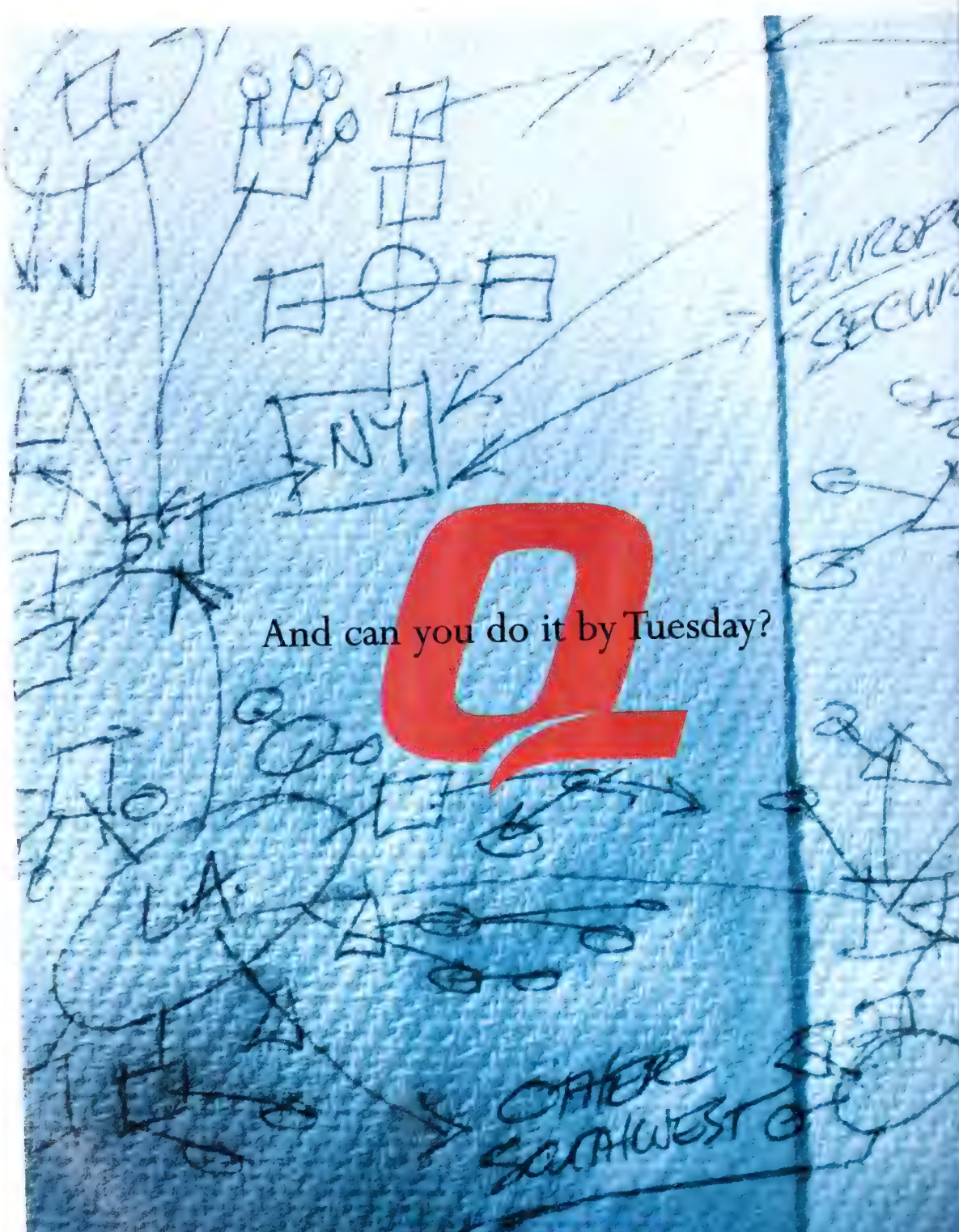
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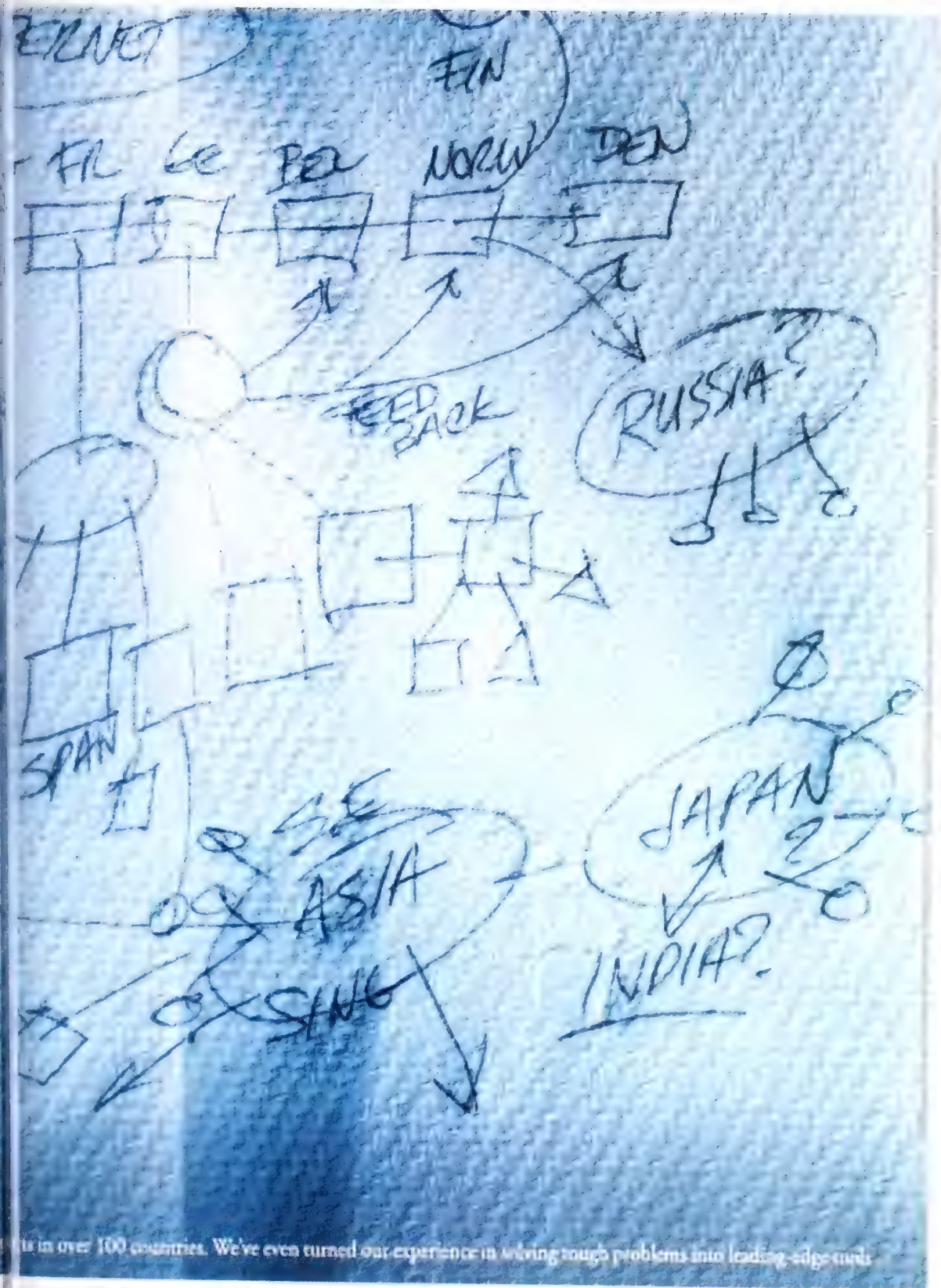
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- ▶ Poor management of research
- ▶ Dearth of venture-capital funding

SWAMPED

Foreign companies, led by Microsoft, dominate personal-computer software

"Toshiba and Hitachi have a lot of expertise that would be very attractive for U.S. computer companies," notes Hiroshi Inose, director general of the National Center for Science Information Systems and head of the Education Ministry's Science Council.

For decades, the *sogo* makers grew and diversified through internal expansion. Constantly adding new manufacturing units for parts, products, and assembly systems, they developed into industrial one-stop shopping centers, cushioned all the while by dependable

mergers, much less acquisition by foreign competitors. But that day could come.

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struggling to become more competitive globally. In this task, their problems begin with an education system that—despite calls for reform—stresses rote learning at the expense of creativity. That worked fine when all a large company required was obedient, self-sacrificing workers. But now, businesses need talented engineers and managers who can take risks.

RESEARCH GAP. If the large electronics makers hope to bounce back, they also need to expand their science and technology base. In Japan, private companies account for 80% of the country's R&D spending. But they pour the bulk of it, 62%, into projects aimed at commercial products, according to the latest survey by the Management and Coordination Agency in Tokyo. Only 24% of the funds go to foster precommercial knowhow, with basic research receiving a measly 14%. In the U.S. by contrast, universities and government institutes account for 64% of R&D spending.

It will be some time before universities are able to fill the gap. While the Education Ministry is sprucing up university research laboratories and providing funding to boost the number of PhDs awarded, schools still lack sufficient funds to conduct breakthrough research.

Kenichi Arai, a molecular biologist who heads the University of Tokyo's Institute of Medical Science, doesn't hold out much hope for quick change. "Japan still has a feudal mind-set," he says. "That was fine during the catch-up period, but it's not going to help us to develop new industries for the next century." Time for the feudal era to end.

By Irene M. Kunii in Tokyo

Special Report

contracts from government agencies and from companies in their respective *keiretsu*—interdependent chains of tightly linked businesses.

Superficially, these giants resembled General Electric Co. and IBM. But there was no Jack Welch or Lou Gerstner to keep an unforgiving eye on the bottom line. In Japan, top brass didn't worry much if a few units posted losses. As long as the economy grew, they could offset red ink in one division with profits in another.

Now, the long recession has ripped the logic from this integrated business model. By the mid-1990s, unable to mask the red ink, all the large players had shuttered some production lines. But top management at most companies was paralyzed. Bound by social and

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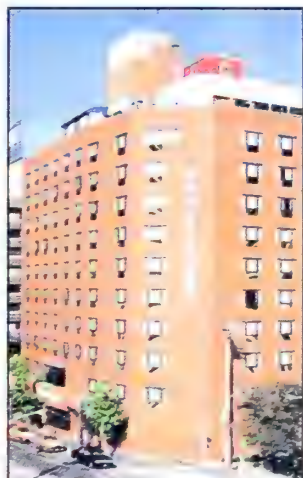


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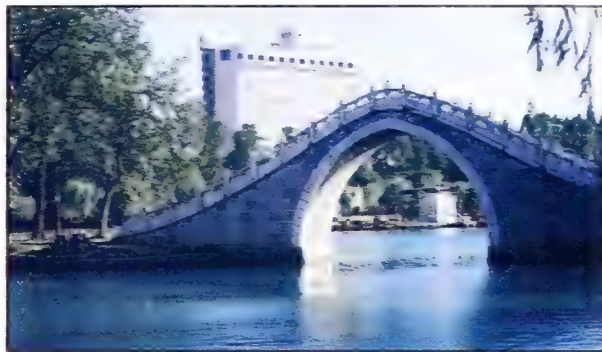


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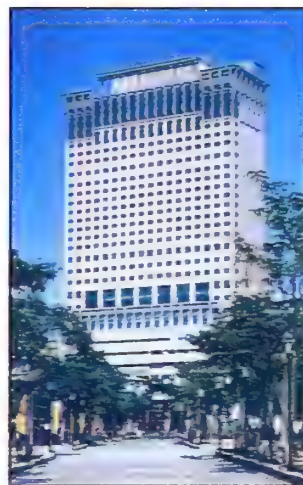
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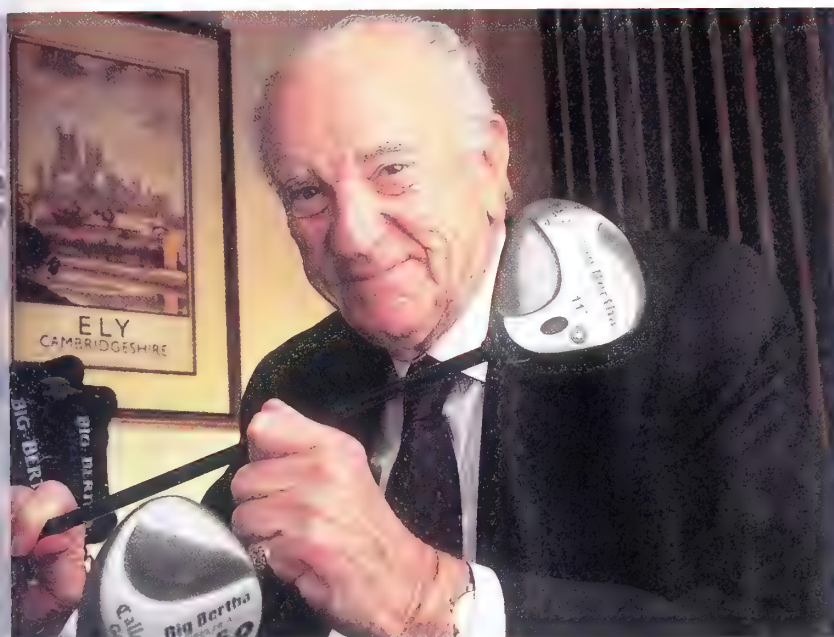
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BACK TO THE FUTURE: Callaway, 79, returned as CEO in October

STRUCTURINGS

AN CALLAWAY IND THE GREEN?

h sales of its Big Bertha club off, it's struggling

Don't ask Ely Callaway if he's too old to return as chief executive of the world's largest golf-equipment maker. At 79—or, as he's quick to point out, 79½—he has lost none of his vigor. "It's reinvigorating," Callaway says of his October comeback, 2½ years after he stepped aside, to rescue the company he founded 16 years ago. Before, as board chairman, he already was coming to work at 8 a.m. every day. He just stays later now. Adds Callaway's physician, Dr. Joseph A. Capozzi: "He's at least 20 years younger than his chronological age."

Callaway's youthful vigor will come in handy, says Callaway Golf Co.'s ball has landed in a sand trap. Its difficulties go far beyond the fallout from the financial crisis in Asia, a region that accounts for more than 20% of Callaway's sales, and last year's El Niño-dampened weather. Certainly help explain an expected slide in industrywide club shipments, to \$2 billion this year. But Callaway's problems are of a different order: income plunged 84% in the third

quarter, to \$5.8 million, as sales slid 33%, to \$172.9 million. "They're sicker than the industry in total," says George Montgomery, president and CEO of archival Taylor Made Golf Co.

The deeper problem for Callaway is that while management focused on an ill-fated expansion into ancillary businesses, its key franchise—the Big Bertha line of metal woods—rapidly lost share in a market that had grown saturated. In U.S. woods, Callaway's share sank to 33% last September, from 49% in October, 1997, according to industry estimates. In part, that's because upstart rivals Orlimar Golf Equipment Co. of Hayward, Calif., and Adams Golf Inc. of Plano, Tex., have grabbed a combined

share of 22% in woods in September, from zero a year earlier. Although Callaway remains the top maker of woods and irons, with 1997 sales of \$842.9 million and operating income of \$221.2 million, it's slipping fast. This year, analyst Shawn C. Milne of Hambrecht & Quist projects sales of \$691 million sales and operating income of just \$50 million.

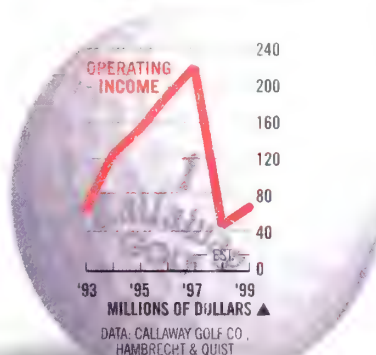
PRICED STICKS. The reason: In the early 1990s, Callaway prospered thanks to the large, heavy heads on its Big Bertha clubs. Those heads provide a bigger "sweet spot," helping golfers hit balls farther and straighter. But they've been widely imitated, and many avid golfers now have all the newfangled clubs they need. Also, Callaway's premium prices left a big opening for newcomers. Callaway cut prices on its metal woods by 11% to 17% in May, but they're still higher than rivals. Many first-time golfers balk at paying more than \$400 for the costliest Big Berthas. Norm Schiffman, 48, a computer executive shopping for clubs at Las Vegas Discount Golf & Tennis in the Westwood neighborhood of Los Angeles, figures he saved hundreds of dollars going with King Cobras from Fortune Brands Inc. "The features attracted me to Callaway, but... the costs jump out at you pretty fast," he says.

To stem its market-share slide, Callaway now must show it can regain an innovative edge. A lot rests on new clubs expected from Callaway in January. Ely Callaway won't comment on them except to say the company won't abandon its focus on bigger club faces.

Meanwhile, Callaway has wasted no time addressing the company's problems since returning as CEO, at the board's request, on Oct. 15. On Nov. 11, he said he would slash about 700 jobs, or 24% of the workforce, by yearend.

And he ousted Donald H. Dye, 56, a longtime associate who became CEO in May, 1996. Dye took the fall for not pulling the plug soon enough on overly ambitious investments in interactive Web sites, golf-book publishing, and computerized swing-analysis centers. Those ventures involved big up-front costs and would have taken years to pay

CALLAWAY: IN THE ROUGH



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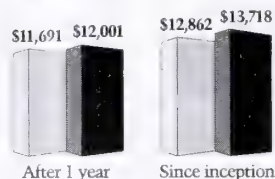
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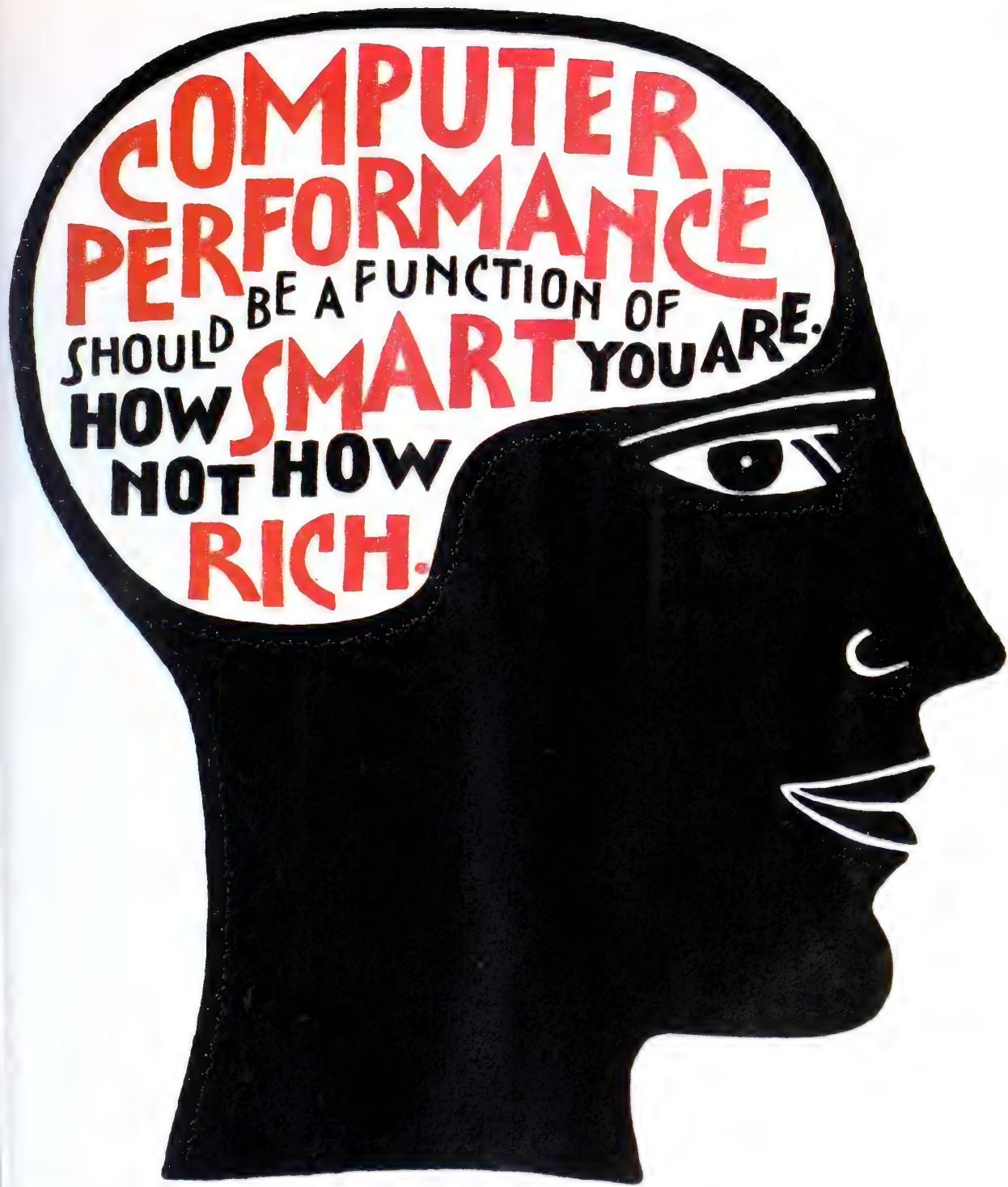
As chairman, Callaway signed off on those investments. "We were too optimistic about our abilities," he acknowledges. At least one big investor says he is satisfied with the restructuring that is now in place. But Pat Becker, the chief investment officer of Becker Capital Management Inc. in Portland, Ore., says he views Callaway's return as a short-term solution. "He's been a great visionary and marketing guy, but I think they have to get somebody [else] in there; if they don't, it suggests that they're up for sale," says Becker, whose company holds about 1.3 million shares. Investors certainly seem happier: After sliding from a 1997 high of 38 to 10% in October, the stock has jumped 20%, to about 12, since Callaway's return.

LEVERAGE. Callaway's biggest gamble now is a bid to enter the ultracompetitive golf ball market. That \$1 billion global business is more stable than clubs, since players can forgo buying new clubs but not balls. And with pretax profits of up to 25%, it's lucrative. But it is dominated by a handful of giants, including Spalding and Fort Belknap's Titleist. What's more, Nike's Taylor Made, a unit of Germany's Adidas-Salomon, also plan to enter the field. That could sharply slice margins. "We'll see a flood of new balls, and whether Callaway can get enough share remaining to be seen," says Milne.

Still, Becker and others argue that Callaway's move into golf balls, not likely in January, 2000, could effectively leverage its brand name. It certainly makes more sense than interacting with games and design centers, they say. One thing, golf balls involve equipment and manufacturing, not Web sites or real estate. Callaway plans a direct attack on Titleist, the top maker of premium balls, with a ball that it claims will have a superior "feel and sound and control." The pressure is intense: Callaway is spending \$150 million to design and develop the ball and build a 198,000-square-foot plant down the street from its Carlsbad (Calif.) headquarters.

Callaway asserts that despite the company's downturn, fundamentals—such as an aging population that tends to spend more on golf—are firmly in place for a turnaround. "The company can be on its way where it ought to be, easily in two years," he says. But that may be wishful thinking. The course suddenly has grown crowded, and the next round will not be as forgiving.

By Steven V. Bortnick
in Carlsbad, Calif.



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EXPENSIVE LOSERS: Despite a dismal season, the Redskins could fetch over \$500 million

FOOTBALL

WHY PETER ANGELOS WANTS THE REDSKINS

It's got as much to do with baseball as it does with football

It's no big deal anymore when Baltimore lawyer Peter G. Angelos peels off a few million bucks and annexes another piece of his beloved hometown. Last week, he bought a 237-acre horse farm a few furlongs from the city line. That came on the heels of news that he's financing a splashy new downtown building to be adorned with a Times Square-style news ticker. Count on that ticker to dish up the latest on the Baltimore Orioles—Angelos owns them, too.

But many in Baltimore were surprised when Angelos revealed that he had his sights on the Washington Redskins. "Am I serious? Of course I'm serious," says Angelos from his 22nd-floor law office, where the view of Baltimore's Inner Harbor goes on for miles.

The estate of late owner Jack Kent Cooke is selling the team and the 80,116-seat Jack Kent Cooke Stadium in a Washington suburb for a price expected to top \$500 million. A deadline of Nov. 23 has been set for initial bids.

As many as 10 investor groups could bid, including New York real estate and banking baron Howard Milstein; Daniel Snyder, the 33-year-old founder of a Maryland communications company; and John Kent Cooke, president of the Redskins and son of the late owner. To that list, add Angelos, a shrewd trial lawyer from East Baltimore who made his for-

tune extracting rich settlements on behalf of shipyard workers exposed to asbestos. That underwrote his purchase of the Orioles in 1993 for \$173 million, then a record for a ball club.

Now, Angelos is nearing another mammoth payday. For his work on Maryland's lawsuit against the tobacco industry, Angelos, 69, stands to collect 12.5%, or as much as \$500 million over the next 25 years. Sure, he may have the cash to buy the Redskins. But in Baltimore, Pete-watchers are wondering why he would want to.

This hardscrabble city and the nation's austere capital, though a mere 37 miles apart, have never been especially chummy. Novelist Tom Clancy, a Baltimore native who was raised on the Baltimore Colts, summed it up once. During the years the city had no NFL franchise, he was asked if he'd ever root for the Redskins. Clancy replied: "I'd sell my children to the gypsies first."

For his part, Angelos insists that he simply sees the Redskins as a business deal. The team has sold out every home game since 1966 and rakes in its share of a new TV deal that pays the NFL \$17.6

billion over 8 years. "Why wouldn't he be interested in an economically successful franchise?" says Angelos.

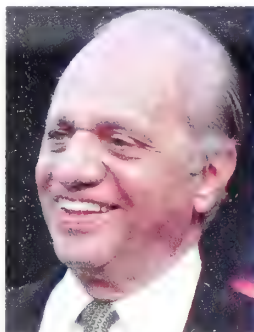
BASEBALL PITCH. In addition, owning the Redskins might help Angelos address a potentially serious problem facing the Orioles. The club draws roughly 25% of its 3.5 million annual attendance from the Washington area, fans the team risks losing if Major League Baseball permits a franchise to move to Northern Virginia. Baseball moves are rare—no team has relocated since Washington lost its franchise in 1972. But Northern Virginia keeps coming up as a potential home for the revenue-starved Montreal Expos. In 1996, when Maryland was approving money for improvements around Cooke stadium, Angelos worked behind the scenes to win a provision effectively elimin-

ing the facility as a temporary home for an MLB team.

"If he owned the Redskins, I believe it would help him block a baseball team in the metropolitan Washington area," says Thomas V. "Mike" Meyer Jr., president of the Maryland state senate and a longtime Redskins season ticket holder. "He'd have an inordinate amount of influence. Fact is, he'd be one of the franchisees in the Washington region."

In fact, Angelos' bid faces obstacles. NFL rules bar "cross-ownership": pro team owners can't acquire teams in other pro leagues. One exception is for owners seeking more teams in the same market. Angelos contends that the Orioles and Redskins are in the same market. The league disagrees. But if Angelos knows how to do anything, it's negotiate.

By Mark Hyman in Baltimore



ANGELOS: A fat payday from tobacco?

THE DOCTOR VS. THE DRUGMAKER

Dispute over a drug's efficacy turns a partnership into war

Three years ago, when Dr. Nancy F. Olivieri noticed that 7 out of 18 of her longtime patients at "Sick Kids"—Toronto's renowned Hospital for Sick Children—were developing iron levels in their livers, an alarm bell rang for her. The patients, suffering from a rare, usually fatal genetic blood ailment called thalassemia, were taking the experimental drug to combat just such buildups. For six years, Olivieri had championed the drug, and now, if it wasn't working—or worse, if it could jeopardize patients' health, she later came to believe—her efforts were a crushing waste. But when she took her anxieties to the drugmaker backing her efforts, Canadian generic-drug powerhouse Apotex Inc., Olivieri's problems got worse. Instead of warning papers about Olivieri's concerns, the drugmaker's science chief, Michael Spino, wanted a panel of experts to review her data. Spino, a pediatric pharmacologist and associate professor at the University of Toronto, did not believe the drug was causing problems. At the time, it was a potentially life-saving therapy for several thousand predominantly children—some several million

These people thought, 'We'll railroad this dumb-looking little blonde.' Bloody hell!"

NANCY OLIVIERI
Hospital for Sick Children



dollars Apotex had spent on L1.

Since then, Olivieri and Apotex have been at war. Each has prominent scientific supporters, and the public fight is becoming a textbook case of how relations can go wrong between scientists and drug companies. It is also feeding fears in academe that special interests—corporations, lawyers, or others—are increasingly willing to muzzle dissenting researchers. Last year, in a *New England Journal of Medicine* article entitled "The Messenger Under Attack," Dr. Richard A. Deyo of Seattle called for "prompt and unambiguous responses from universities and professional organizations" to back researchers. The Olivieri affair echoes the case of Dr. Betty Dong—a University of California researcher who fought corporate lawyers for years before getting permission last year to publish negative information on a thyroid drug made by Knoll Pharmaceutical Co.

Between Olivieri and Apotex, the vitriol is flowing both ways. "She is wrong," asserts Spino. He says Olivieri is "highly opinionated," and that "if you don't see things the way she wants, then you're wrong." Olivieri's tart response: "They underestimated me as a woman and a scientist. They've underestimated my ability to say, 'No—I'm not going to be bullied.' These people thought, 'We'll just railroad this dumb-looking little blonde.' Bloody hell." Both sides have threatened legal action, though neither has moved into court.

POTENTIAL. For all the current rancor, the collaboration between Olivieri and Apotex got off to a promising start. In the late 1980s, Olivieri, a Harvard University-trained researcher, became intrigued with deferiprone, dubbed L1. Researchers at Ciba-Geigy Ltd. (now Novartis) had rejected it for thalassemia, a kind of anemia, because of such side effects as birth defects. But Olivieri thought it could be helpful. In 1993, Apotex began funding studies designed by Olivieri in which more than 180 patients in Toronto, Montreal, Philadelphia, and Italy.

In 1995, Olivieri published an upbeat *New England Journal* article on L1. Its potential seemed enormous: Pills could replace infusions that thousands of thalassemia

patients undergo nightly to cut hazardous iron levels.

But soon after her upbeat 1995 findings, Olivieri began to see signs that L1 was failing in longtime users. "I wanted to tell the patients there was a problem," she says, but "business interests prevented that from happening easily. And business interests have attempted to cover it up." Spino denies any coverup.

The case is hardly that simple. Officials at Apotex mustered some impressive scientists who said Olivieri was mistaken. A dozen scientists—some involved in the tests, some not—looked over her data. "The data we had did not substantiate the claim that there was a loss of efficacy," says Dr. Elias Schwartz, a hematologist at Alfred I. duPont Hospital for Children in Wilmington, Del.

The scientific issues are not clear-cut. Even one of Olivieri's co-investigators, Sick Kids researcher Dr. Gideon Koren, disputes her findings. But Olivieri has supporters, too. "The data are very disturbing," says Dr. Gary M. Brittenham, a Columbia University hematologist who worked with Olivieri. Dr. David G. Nathan, a thalassemia expert and president of Dana-Farber Cancer Institute in Boston, says L1 "is largely ineffectual...it just doesn't work well in most patients." In an editorial in the *New England Journal*, researchers said Olivieri's findings differed from those of some other studies. They concluded that "a concerted effort" is needed to ascertain L1's safety and efficacy.

DISMISSED. Olivieri was angered by the company's refusal in early '96 to change the consent form to flag the drug's ineffectiveness. At that point, she did not yet think the drug was harmful. She then went to the ethics board at Sick Kids and was told to advise patients and regulators in Ottawa about her concerns. Apotex' response was swift: It halted the Toronto trials while keeping the others going. And it dismissed Olivieri as international coordinator. Spino's explanation is that she could not be the principal investigator "in studies



"She is wrong. If you don't see things the way she wants, then you're wrong"

MICHAEL SPINO

Research chief, Apotex Inc.

of a drug she does not believe works."

Relations really got ugly then. Apotex, noting Olivieri had signed a confidentiality agreement, suggested repeatedly that it would sue her if she went public with the test results. Infuriated, she detailed her worries about the drug at a late 1996 scientific conference. Then, last August, she published her critique of the drug in the *New England Journal*. She even cited data showing that the drug seemed to be causing a hardening of the liver in some patients. Apotex, admitting it did not want to sully its image by taking a researcher to court, did not sue her.

Olivieri, angry that Sick Kids failed to back her against Apotex' legal threats, asked the hospital to endorse her and to reveal its ties with Apotex. She and her supporters suspect company dona-

tions to the hospital bought administrators' silence. Sick Kids stoutly denies that.

The hospital says it tried to stay above the fray. "Scientific disagreements occur all the time," says Alan L. Goldbloom, a hospital vice-president. "We recommend that people publish their material and let it

out in the literature." As for Apotex threats, he says Olivieri—not the hospital—signed the confidentiality pact, adding that she had privately obtained a lawyer, so she didn't need a hospital attorney. Still, Sick Kids has changed practices to prohibit researchers from signing such contracts without its chief review.

TAPPED? Life is now tougher for Olivieri. She says Sick Kids twice tried to fire her. The hospital disputes that. And she fears her office phone has been tapped. She is smarting from Spino's claims that her studies were deeply flawed. And she has squabbled with leagues who sided with Apotex. She also rallied many Sick Kids doctors to push for a full-blown inquiry by experts acceptable to her. Instead, the hospital's board is expecting a review of the events by its appointed outside experts on Nov. 30.

The Olivieri affair is likely to fade away as Apotex has wrapped up trials and is seeking approval for L1 in Europe and Canada, though not yet in the U.S. However, approval could be jeopardized as researchers debate whether the drug is helpful or harmful. And since Olivieri's findings are likely to be covered by regulators, she and Apotex may see a battle each other in coming years.

*By Joseph B. ...
in To*

ANATOMY OF A DISPUTE

- Dr. Nancy Olivieri, originally a booster of a drug to treat the blood disease thalassemia, became convinced that the drug was ineffective—and possibly harmful.
- Apotex, the drug's maker, said it would sue her if she violated a confidentiality agreement by speaking out about the drug. Senior Vice-President Michael Spino said Apotex' experts and a dozen other investigators thought she was wrong.
- Olivieri, bristling at what she said was an attempt to muzzle scientific debate, defied Apotex by publishing her concerns in the prestigious *New England Journal of Medicine*.
- Apotex maintains the drug is helpful, arguing that the dispute should not deny patients a potentially life-saving treatment.

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Brand companies find new ways to keep generics at bay

It's a blockbuster that Hollywood would envy. Since its approval in 1993, the allergy drug Claritin has fueled Schering-Plough Corp.'s exceptional growth. In 1998, the line of Claritin products is expected to rack up \$2.1 billion in sales, 27% of Schering's total revenues, accounting for about 34% of total profits. By 2002, the drug's sales are likely to balloon to \$4 billion, according to SG Cowen. But that's also the year a key patent on Claritin is set to expire—and that could trigger a wave of cheaper, generic versions able to snatch a big chunk of Schering's market in just one year.

Or perhaps not. Analysts and investors are increasingly confident that Schering has found the right formula to keep the Claritin money machine chugging along

for years beyond 2002. While Schering won't say much about its Claritin patent efforts, industry observers say the company has a three-pronged strategy in mind: using secondary patents to block or delay generic competition; lobbying for a patent extension in Washington; and planning the rollout of a follow-on version of Claritin that could enjoy patent protection through 2014. Says Cowen analyst Stephen M. Scala of the fortress Schering has constructed around Claritin: "It is formidable."

More than three dozen of today's most profitable pharmaceuticals—accounting for 25% of U.S. prescription sales—are due to go off patent by the end of 2002, according to consulting firm A. T. Kearney Inc. If the makers of those branded drugs delay generic entry by only a few

months, they stand to gain millions. Brand companies have gotten far more sophisticated in terms of how they protect their franchises," says HSBC Securities Inc. analyst Jack Lamberton. And the others using or likely to use similar tactics as Schering are Astra Pharmaceuticals, the maker of the blockbuster cancer drug Prilosec; Eli Lilly, with the antidepressant Prozac; and Hoechst Marion Roussel, maker of Cardizem CD medicine. DuPont Pharmaceuticals has backed laws in several states that could provide greater protection to blood thinner Coumadin. More big pharmaceutical makers are sure to follow.

NO HOLDS BARRED. No company more reason to fight than Schering. "Claritin is an important product for Schering-Plough and we fully intend to protect and strengthen this franchise," says the company. It laid the groundwork early. In 1984, four years after the original compound patent, Schering applied for a second patent to cover a key biological spin-off of Claritin: a molecule formed as the body is broken down the drug, called a metabolite. Schering can argue that any competitor's generic drug that produces the same metabolite in the body infringes on its patent, which doesn't expire until 2002. That means competitors might have to come up with a generic compound that



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metabolized in a completely different way—an extremely difficult task.

Whether Schering will be able to defend its metabolite patent in court is unclear. Legally, metabolite patents have a mixed record. The generic company IVAX Corp. won a case in 1996 challenging a metabolite patent on the old allergy drug Seldane by arguing that the patent only covered the metabolite compound when it was created synthetically, outside the body. But a 1994 case involving the antibiotic Duricef found that a metabolite formed in the body could violate a drugmaker's patent. Legal experts figure Schering will have to show that it took some serious work and brainpower to identify the Claritin metabolite to make the case that it deserves a separate patent.

If the patent does succumb to legal challenges, Schering may still have delayed the generics. The Food & Drug Administration must put a 30-month freeze on a generic-drug application if the branded version's company sues over patent infringement. Even if the generic company wins FDA approval once the 30-month delay expires, most won't risk going to market until the patent litigation is resolved—because if a generic drugmak-

er loses, it can be liable for damages based on the brand's lost profits. "That would destroy most generic companies," says William A. Fletcher, president of generic drugmaker Teva Pharmaceuticals USA.

But Schering isn't taking any chances. This fall, the company pushed for federal legislation that would allow a three-year extension on its original Claritin patent.

A suit over patent infringement could put a generic drug on ice for 30 months

The proposed legislation addressed so-called "pipeline drugs" that were already in clinical trials when the drug patent laws were overhauled in 1984.

Under a compromise, the law gave those drugs an extra two years of patent life to compensate for time lost due to long FDA reviews. Schering is arguing that the extension on pipeline drugs should have been five years, the same

as for many other products. "We believe [Claritin's] patent life was unfairly shortened," Schering says.

An outcry from consumer groups and generics companies squelched Schering's lobbying push, but Senator Orrin Hatch (R-Utah), co-author of the 1984 law, has already said that Congress should revisit the legislation. Such a debate would create an opening for Schering to reargue its case.

Finally, there is Schering's trump card. Late last year, the company struck a deal with Marlborough, Mass.-based drugmaker Sepracor Inc. to develop what may be a more potent version of Claritin now in its final phase of testing. Analysts figure the new drug could be on the market as early as 2001.

The deal was a cunning stroke by Sepracor. While Schering holds a broad patent on the Claritin metabolite, it never patented a very specific use of the compound in treating allergies, giving Sepracor an opening to quietly obtain what is called a method-of-use patent. That gives it the right to sell a drug based on the Claritin metabolite for the treatment of allergies. Schering had the choice but to team up with Sepracor to develop the new version.



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GUARDING THE FORTRESS

Big drug companies are fighting generic versions of their best-selling brands in several ways:

ALL IN THE LAWYERS File suits charging that generics violate patents covering how a drug is made or how it is broken down in the body. Hoechst Marion Roussel has brought such suits over its heart medicine Cardizem CD.

LOCK THE SWITCH DuPont Pharmaceuticals pushed laws in several states that could make it tougher to switch people between its blood thinner Coumadin and generic versions, arguing such changes could lead to correct and dangerous dosage.

WEAKEN THE MOLECULE Develop new forms of drugs with fewer side effects or better potency, as Astra is doing with its ulcer drug Prilosec. If consumers switch to the improved product, the generic version of the older drug will lose out.

THE WASHINGTON FIX Schering pushed for passage of legislation this fall that could result in an additional three years of patent protection for a group of drugs, including the allergy drug Claritin.

The partnership could be bad news for the generic-drug companies. If Schering launches a new version of Claritin well before the generic product hits the market, it's likely that a large number of users will stick with the brand. Pfizer Inc.'s heart drug Proia XL, a newer version of an old drug, has already proved the success of such a strategy. "You switch all the

patients over to this new version," says David P. Southwell, chief financial officer at Sepracor, "and you essentially have a patent-protected platform through 2014."

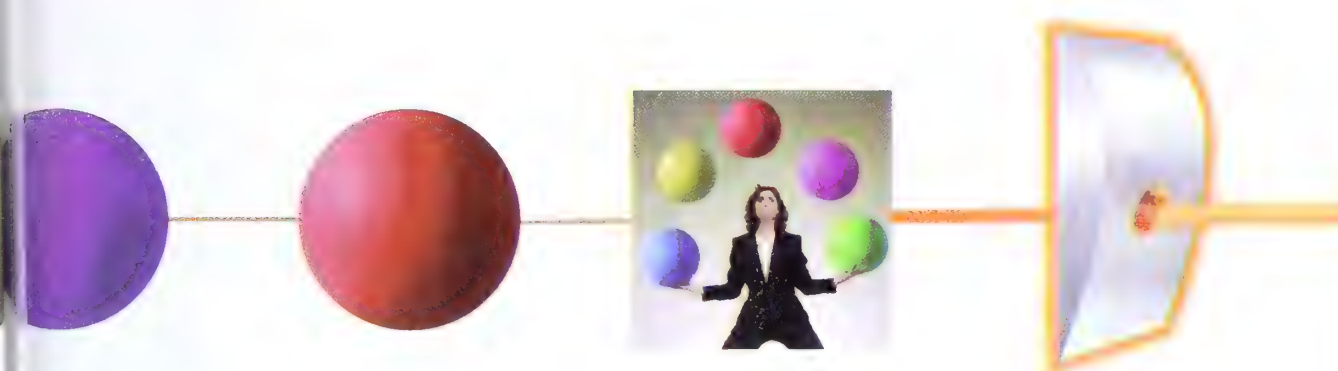
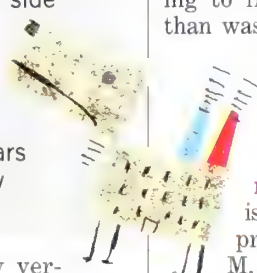
Astra Pharmaceuticals, the U.S. arm of Sweden's Astra AB, is readying an application for FDA marketing approval of a new stomach-acid remedy based on its ulcer medicine Prilosec, currently

the biggest-selling drug in the world, with \$2.3 billion in U.S. sales last year. Prilosec's U.S. compound patent is due to expire in 2001. Astra "could take the largest-selling drug in the world out another 12 years," complains Bruce L. Downey, chief executive officer of generic player Barr Laboratories Inc.

If all else fails, Schering could try to make the original Claritin available over-the-counter. Certainly, Claritin is a well-known name. In the first half of 1998, Schering shelled out \$66.7 million on consumer ads for Claritin, according to IMS Health Inc. That is more than was spent on any other prescription drug.

But Schering says the company has no plans to rush Claritin to the over-the-counter market. "You don't need to go OTC if your product is blowing everyone away on the prescription side," says Ronald M. Nordmann, partner at health-care money manager Deerfield Management Co. He figures the company may decide to hold off on an over-the-counter switch until the 2014 patent expiration approaches. By then, Schering may have come up with some other armaments for its fortress.

By Amy Barrett
in Philadelphia



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FROM THIS HERB, A BLOW TO THE KIDNEYS

MORE BAD NEWS FOR CONSUMERS OF HERBAL SUPPLEMENTS: Doctors at the Washington University School of Medicine in St. Louis and at other clinics say that sustained high doses of an energy-boosting Chinese herb called ma huang can cause kidney stones.

In the July issue of the *American Journal of Kidney Diseases*, doctors described the case of a 27-year-old bodybuilder who was hospitalized four times with kidney stones. Analyzed at Washington University and at the Louis C. Herring & Co. lab in Orlando, the stones proved to be 95% ephedrine, an adrenaline-like substance that is used to treat asthma and obesity. Ephedrine has also been linked with hundreds of adverse reactions including strokes, heart attacks, and seizures. And it is the active ingredient in ma huang.

According to author Dr. Thomas R. Powell, now in Pittsburgh, the St. Louis patient consumed large quantities of such supplements daily for more than a year, prior to the kidney stone episodes. Glenn W. Austin, vice-president of the Herring lab, says he has identified 200 ephedrine-linked kidney stones this year, compared with just 20 collected in 1995. □

WINNING THE JEANS RACE

SEVERAL LEAVES FROM blue woad plant, add to a vat of water containing wood ash and bran, boil continuously till water turns blue. This formula, which is straight out of medieval recipe books, may be the key to making jeans less environmentally damaging. In the Nov. 19 issue of *Nature*, a team of researchers from the University of Nottingham reports that textiles can avoid generating toxic waste from dyes if they use natural practices. Before it can be used, indigo must be reduced to make it washable. Modern tex-

tile companies do this by adding sodium dithionite, a toxic and caustic chemical that generates a lot of waste. Instead, recommends Philip John, the principal author, mills should dissolve their indigo using a sulfur-eating bacterium called *Clostridium* that he now knows inhabits the medieval woad vats.

It all sounds simple enough. But even John admits that there are serious drawbacks: The bacteria give off a noxious smell—like rotten eggs. And one species, if ingested, causes botulism poisoning. But despite all these obstacles, Arthur J. Toompas, the corporate environmental manager at Cone Mills Corp., which makes the indigo dye for Levi Strauss & Co., says he will continue to look into the benefits of *Clostridium*.

Ellen Licking



DEAN:
typical old denim

THOSE LEAVES COULD BE LISTENING

NEW RESEARCH SUGGESTS that plants may get the message. A team of scientists at New York University and the Chinese University of Hong Kong have found that plant cells communicate with the same chemical signals used by human brain cells. The scientists, led by NYU biologist Gloria M. Coruzzi, identified molecules called glutamate receptors, widely believed to exist only in animals, in the mustard plant *Arabidopsis thaliana*.

Glutamate signaling plays a vital role in human brain function and can result in epilepsy or Alzheimer's disease if it goes awry. But in *Arabidopsis* it alerts seedlings to the presence of light. The scientists' finding helps explain why certain plant

chemicals, such as cocaine and nicotine, can affect human brain cells. These compounds may be components of signaling systems that developed eons ago, before plants and animals diverged from a common ancestor.

And Coruzzi's discovery could have profound implications for drug discovery and testing.



Someday, pharmaceutical companies might be able to use plants to test the effects of new Alzheimer's drugs instead of injecting the compounds into lab animals. Ellen Licking

INNOVATIONS

The International Electron Devices Meeting (IEDM) is a top spot for peeking at the distant horizons of chip technology. Here is a preview of some items that will be the talk of this year's show, on Dec. 6-9 in San Francisco:

SYSTEM CHIPS. These are single slices of silicon stuffed with all the electronics that many products need. Chipmakers believe that one-chip systems will be common soon after 2000. But combining memory and logic circuits is tricky, because the two types of circuits require different processing methods. Representatives of Mitsubishi Electric, Motorola, and NEC will discuss newfangled hybrid production techniques.

FOUR-GIGABIT MEMORY CHIPS. Researchers from Samsung Electronics will display tiny

memory cells that open the door to chips that store up to 4 billion bits. That's enough to hold almost two sets of the *Encyclopaedia Britannica*. Such chips should be storming the market by 2005.

FAR-OUT TRANSISTORS. While most of the chipmaking methods to be discussed at the IEDM will focus on shrinking transistors to around the 0.1-micron widths needed after 2005, the researchers at Lucent Technologies Inc.'s Bell Laboratories will look at what it'll take to trim them to 0.01 micron. That's just 20 silicon atoms across. If 0.01-micron transistors become feasible—a feat that is not anticipated before 2025—then one memory chip will be able to store 25,000 sets of the *Britannica*. Otis Port

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwnov@businessweek.com

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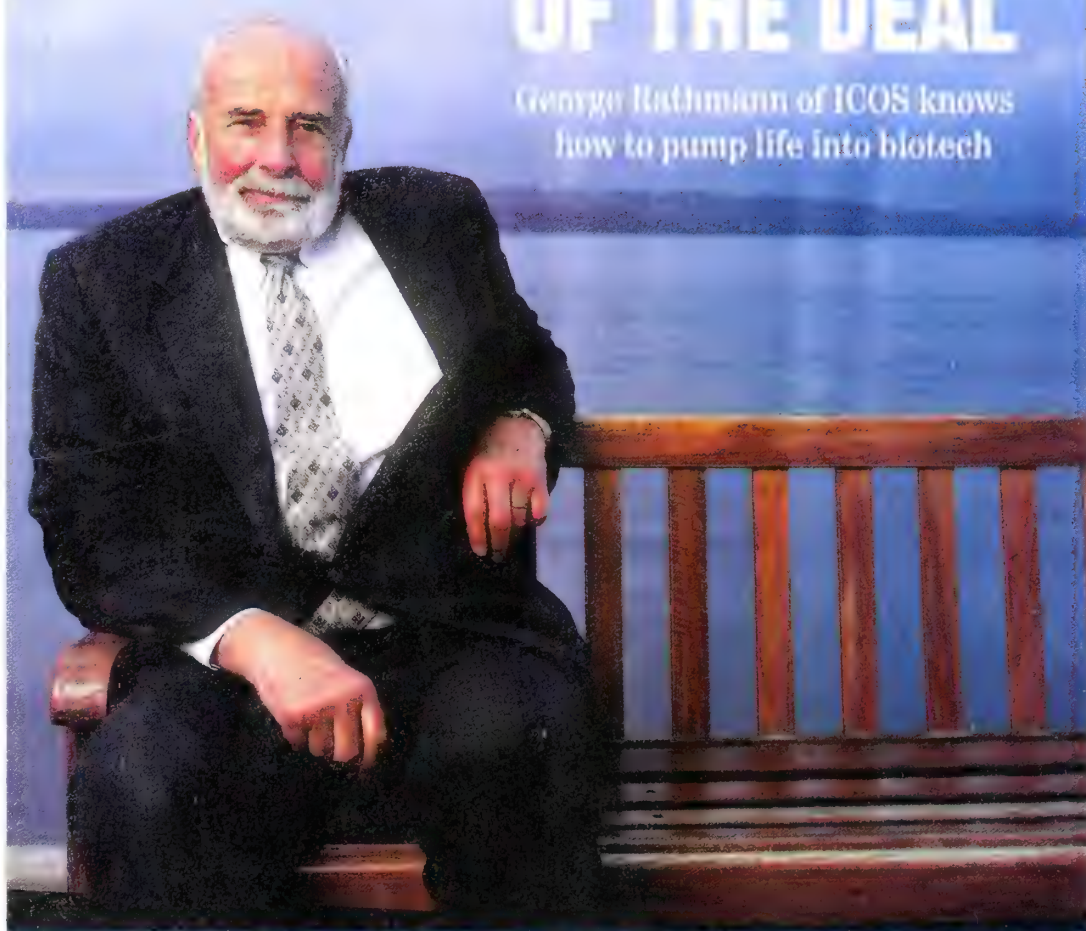
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THE SCIENCE OF THE DEAL

George Rathmann of ICOS knows how to pump life into biotech



George Rathmann is a nut for games. Back in the late 1970s, when he was the research chief for Abbott Laboratories, a co-worker left a Rubik's Cube sitting on Rathmann's desk. Entranced by the seemingly simple challenge, Rathmann proceeded to spend "night and day" on the puzzle until he finally solved it—three days later. Even so, that's no easy feat: Out of 43 quintillion possibilities, there is only one correct combination.

These days, as the 70-year-old CEO of ICOS Corp., Rathmann is absorbed in solving another arduous puzzle. Rathmann joined ICOS shortly after its founding in 1989. Ever since he has been working to distinguish the Bothell (Wash.) company from hundreds of other biotech startups struggling to turn cutting-edge research into commercial drugs. Finally, it

looks like the years of hard work may pay off: Two months ago, Rathmann persuaded Eli Lilly & Co. to pump at least \$75 million into the development of a new ICOS anti-impotence drug.

The Lilly deal was a huge coup; executives there believe ICOS may be close to coming out with the next Viagra. They've got good reason for their vote of confi-

Friends and associates call him "Golden Throat" for his fund-raising skill

dence. Rathmann had plenty of coup in his long career as a biotech pioneer. After leaving Abbott in 1980, he spent years building Arris Inc., based in Thousand Oaks, Calif., from a tiny startup into a \$2.4 billion dynamo. Sales of key drugs developed under Rathmann made Amgen the biggest biotech company in the country. **"COMPASS."** Although Rathmann is little known outside the biotech world, within the industry, he has made his name spotting hidden treasures in ongoing research. "He's like a compass pointing in the right direction," says Larry Milligan, former chief scientist at Abbott and now a biotech venture capitalist. He sits on the ICOS board. Adds James D. Watson, former head of the Human Genome Project to map human genetic code: "George is a survivor. He's using his mind to shape science."

But unlike most other scientists, Rathmann is a master of raising the

ital needed to develop new drugs. Two months ago, friends and associates dubbed the burly and affable Rathmann "Golden Throat" for those money-raising ties. And it was Rathmann's salesmanship that got ICOS rolling in 1990 at a dinner with Microsoft Chairman William H. Gates III. ICOS' two founding partners, Robert Nowinski and Christopher Henne, the time coffee was served, agreed to write a check for \$5 million. "Bill liked the idea" of ICOS, says Henne. "Having George there helped." In 1994, Gates put in an additional \$10 million, becoming the largest shareholder with 13% of the company.

Rathmann won over Gates the way he has persuaded so many others to invest in his companies. The outspoken Wisconsin native can make



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Rathmann faces plenty of hurdles at ICOS: The company is burning through cash, and any profits are years away

the most complex mysteries of human DNA research comprehensible. At the same time, he doesn't mince words about the risks of investing in biotech, including the dangers for a small company like ICOS in dealing with giant drug companies. "You must protect your research instead of selling off ideas...too early in the game," warns Rathmann. "You hold on almost to the point of desperation, and then you get some sort of breakthrough."

If living close to the edge drives Rathmann, he has picked the right industry. Although bioengineering is producing radical new drugs, developing one can cost up to \$500 million. And ICOS, even with its Lilly partnership, faces daunting hurdles. The company burned through \$42 million last year for trials on four new drugs. Profits are still years away.

IMPATIENT. It wasn't money that drew Rathmann to chemistry when he was growing up in Milwaukee. As a teenager, he used his grasp of chemical reactions to create spectacular explosions in the neighborhood. He now says his early pyrotechnics display was mostly intended to impress his high school girlfriend, Joy. It worked: The couple have been married since 1950. An impatient youth, Rathmann completed his BS in chemistry at Northwestern University by age 18. But he was so irate when the university denied him entry into medical school that he huffed off to Princeton University to get a PhD in chemistry instead. He landed his first job with 3M Co. as a plastics researcher.

Although highly regarded, he was never considered a star during his 21 years at 3M. Still, Rathmann doesn't regret his time there. He helped develop Scotchgard, one of 3M's most successful products, and managed its medical-

imaging business, according to Milligan. "There is no better culture than 3M to learn about risk-taking and translating science and technology into commercially successful products," says Rathmann.

When Litton Industries Inc. offered him the chance to head its newly formed medical-systems unit, Rathmann, by then the father of five, went for it. It was the worst decision of his life, he now says. During the early 1970s, Litton was buying businesses left and right to boost

sales. The result: chaotic management and little coordination among divisions. Lacking management training and in the dark about what was expected of him, Rathmann floundered. In 1974, he says, "I left before I was escorted out."

But Rathmann landed on his feet as the head of diagnostic research at Abbott Labs, where he developed tests to detect pregnancy and certain diseases in early stages. It was a big break. Discovering his "golden throat," Rathmann lured top scientists from competitors and academia and put them to work on projects that have since propelled the division into Abbott's most

profitable. But Rathmann also sternly cut dead-end projects. "He's got all the right ingredients in one complete package," says BioGen Inc. Chairman James Vincent, who hired Rathmann at Abbott.

In 1980, Rathmann took a leave to study molecular biology at the University of California at Los Angeles. But when he got to California, a UCLA professor impressed with Rathmann's business background invited him to head Amgen, then a tiny new biotech startup. "I was stricken," says Joy Rathmann of the move west. "But it was the best thing we ever did." On his way out the

door, Rathmann even talked Abbott into investing \$5 million in the startup.

Once at Amgen, Rathmann quadrupled an additional \$14 million. After launch, the company grew so fast that Rathmann moved his office into a trailer in the parking lot to make space for work. But it was three nerve-racking years before the company hit pay dirt. In fact, Rathmann says he was on the verge of pulling the plug on research to cover the protein responsible for stimulating red blood cell production when the team made its breakthrough. Then, Rathmann had to fight off a series of pre-disputes with rival Genetics Institute. In the end, the research led to Eprex, which has become a billion-dollar drug by improving the lives of hundreds of thousands of dialysis patients.

GOOD READING. Rathmann, by now wealthy, quit Amgen in 1988 to spend more time with his family and "let the younger generation run things." Two years later, he was back at Amgen, winning and dining Gates and other investors. "It was the science that brought him back in," says his wife. "He couldn't leave it alone." Still, the Rathmanns make a point of taking their private jet for regular visits with their five grown children and eight grandchildren. Always the proud dad, Rathmann's daughter Peggy recently published a popular children's book, he sent out to dozens of investors.

They would have been happy without the book. Since ICOS went public at \$8 in 1991, it has outperformed most of its peers. Shares traded at \$25 last August and are now at \$20—largely on expectations that it will eventually hit it big with a drug. Rathmann wants to be around when that day comes. ICOS, he says, is like reading a great book. You won't see how it comes out."

But the clock is ticking. "Everybody would love to have George right in the thick of things forever," says Jane LeCocq, CEO of Gryphon Science, an ICOS board member. But unless there is a genetic breakthrough in the process, Rathmann will soon have to turn his attention to finding a successor. And that will no doubt prove tougher than solving a Rubik's cube.

By Seanna B. B. in Bothell, WA

GEORGE RATHMANN

BORN 1928, Milwaukee

EDUCATION BS, chemistry, Northwestern University; PhD, chemistry, Princeton

UNREALIZED AMBITION To become an Olympic skier

BIGGEST PROFESSIONAL ACHIEVEMENT Developing Epogen, a red-blood-cell stimulant that has provided huge benefits to dialysis patients

WORST CAREER MOMENT Resigning from Litton Industries after failing as head of its medical systems division

CURRENT PROJECT Developing a new anti-impotence drug

BEST THING ABOUT BEING AN ENTREPRENEUR Freedom to pursue promising ideas

FAMILY Married, five children

HOBBIES Avid Seattle Supersonics fan; skiing at second home in Vail, Colo.; chess; Scrabble

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Renaissance Chicago Hotel, Chicago	\$119
Renaissance Oak Brook Hotel, Chicago	\$69
Renaissance Springfield Hotel, Springfield	\$59
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SWEETHEART, GET ME REWRITE

Port Zuckerman's media empire is not having a good year

Aortimer B. Zuckerman is known as a perpetual-motion mogul who glides easily among the worlds of real estate, finance, publishing, and punditry. But even for it has been an unusually hectic year. In June, for the sixth time in the years he has owned the weekly news magazine *U.S. News & World Report*, he replaced the editor. On Nov. 13, in his latest bid to boost the fortunes of his New York City tabloid, the *Daily News*, Zuckerman hustled in a new Sunday

editor. And a Moscow tabloid, launched in May with his backing, is on its last legs amid Russia's economic crisis. "The effective revenues went down when people had to choose between newspapers and bread," Zuckerman says glumly.

But Zuckerman's most pressing problem has been at Applied Graphics Technologies Inc.—the company that he and his partner, Fred Drasner, took public in 1996—which manages the preparation of digital images for advertisers and publishers (including The McGraw-Hill Companies, publisher of *BUSINESS WEEK*). Stock in fast-growing AGT rocketed from an initial public offering price of 12 a share to 62 in October, 1997. Then it surprised investors with an earnings warning in October and saw its stock plummet to 7. That nearly vaporized Zuckerman's 22% stake, sending it from \$309 million to \$35 million.

ON HOLD. AGT's tumble is only the most pressing of several challenges to Zuckerman's master strategy. To further tap the surging equity markets, he had intended to take two more companies public—his media holdings and a company that prints glossy items such as brochures and calendars. Today's dicey IPO market and competitive threats to his media empire are putting those plans on hold.

Zuckerman isn't feeling too much pain from his paper losses, though. More than a year ago, he and Drasner shrewdly sold a chunk of AGT shares, at \$43 apiece, tucking away a total of \$140 million. Zuckerman also holds \$165 million worth of stock in Snyder Communications Inc., a direct marketing business they helped start. And his chief asset remains his \$270 million stake in Boston Properties Inc., the thriving real estate company he co-founded 28 years ago and took public

STILL UPBEAT: Zuckerman is waiting for the right time to tap the markets



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Media

last year. Says Zuckerman: "My net worth is now down to a level I never thought I'd get up to."

Which isn't to say the meltdown at AGT is being taken lightly. Last month Drasner resigned as head of the magazine group—encompassing *U.S. News*, *The Atlantic Monthly*, and *Fast Company*—and parachuted in to run AGT day to day. The pre-press company had been clocking 25% profit growth, largely by sewing up outsourcing contracts with publishers and other companies. But Devon Group Inc., a competitor it acquired in February, fell short of targets. At the same time, AGT's pipeline of new contracts dried up. Drasner says management suffered from "victory lap syndrome" but insists that the situation is now under control and growth rates will be restored. So far, the stock has recovered slightly, to 14. Still, analyst Robert P. Curran at Merrill Lynch & Co. warns of a "credibility problem, and it'll take time for that to be rebuilt."

NOT IMMUNE. Meanwhile, in real estate—where Zuckerman says he is having his best year ever—Boston Properties' stock has been under pressure. The real estate investment trust owns 116 office properties concentrated in the Northeast and San Francisco, totaling 21.5 million square feet. The REIT went public in June, 1997, at 25 and reached as high as 37, but has fallen back to 30. While the stock is down 9% this year, that's a far better showing than the Morgan Stanley REIT Index, which is off 17% (chart). Why? Analysts praise Boston Properties' portfolio, which includes the recent purchase of San Francisco's Embarcadero Center, and for developing properties, such as the two sites it recently scooped up in New York's Times Square.

Still, the company isn't immune to fears that the real estate market has peaked. "Boston Properties has significant exposure to the financial services industry," notes analyst David Kostin of Goldman, Sachs & Co. And it is heav-

ily skewed to the fortunes of New York City, where three towers account for 43% of its annualized income.

New York's prosperity has also been key to the *Daily News*. But the 10-year-old investment will need more pay off. Zuckerman says the paper is profitable but having only an "average" year. One reason: the two-year-old assault on the Sunday edition by its snarling rival, the *New York Post*, owned by Rupert Murdoch. Sales are down from

952,000 before the *Sunday Post* launched with a 25¢ cover price. \$1.50 for the *News* the six months ended Sept. 30, the *Sunday News* sold an average of 810,000 copies, the Audit Bureau of Circulations Inc. The *Post* reported Sunday circulation of 382,000 and now sells for 15¢ vs. the *News's* 10¢. Zuckerman and Drasner don't release financial results but say circulation is now rising.

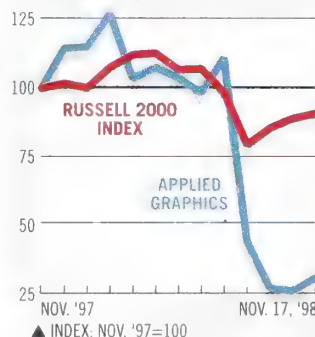
Whether they ever take their mutual holdings public will depend on deriving steady, growing profits from the *News*, says newspaper analyst John Morton of Morton Research. "Obviously, Murdoch starting a Sunday paper has hurt them," says. So Zuckerman has tapped veteran editor Edward A. O.

ner to oversee the edition of the paper that accounts for 40% of its revenues. But instead of reporting to *Daily News* Editor-in-Chief Dot Krennek, Kosner reports to Zuckerman, editorial chieftain, Harold M. Ehrlich. This has fueled speculation that Kosner will be the latest in Zuckerman's terrier of departing editors. Zuckerman denies this.

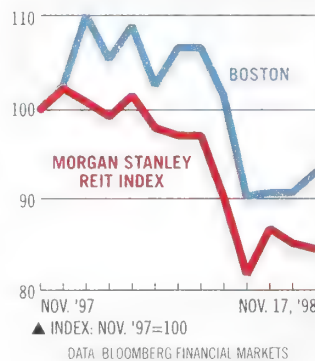
And true to form, he is relentlessly upbeat despite the new pressures facing him, especially at his public company. "You have to recognize that you own the assets anymore, you own a share in that company," he says. "You're on a different kind of treadmill." And, as found with AGT, the treadmill can occasionally come to a jolting stop.

By Richard Siklos in New York

APPLIED GRAPHICS SHARES HAVE TANKED...



...BUT BOSTON PROPERTIES IS BESTING MOST REITS



A woman with short brown hair, wearing a dark suit over a white collared shirt, is sitting on a large stack of StorageTek tape drives. She is looking towards the camera with a slight smile. The background is a bright, slightly blurred office setting.

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Cover Story



early October, and Richard E. Rainwater should be in dealmaking heaven. The stock market has just wrapped up its worst three-month performance in eight years. Investors are worrying about hedge-fund losses, emerging-market collapses, even a U.S. recession. For an investor like Rainwater, it's a classic opportunity. A teenage Texas drag turned Wall Street legend, he built a billion-dollar-plus net by buying into beleaguered businesses at discount prices, sometimes cutting four or five deals over several lines simultaneously.

On this breezy fall morning, the 54-year-old Rainwater is doing deals. He isn't trying to find his next Walt Disney or Honeywell Inc., to name two companies he bought when they were cheap. Rather, Rainwater is going for Doodle—his and wife D. Moore's puppy, who has escaped from the play area of their home on New York's Upper East Side. An elevator excursion down to the private terrace quickly reveals the four-month-old keeshond is healthy and sound. And as he plays with his pup, the ever cool, laid-back Rainwater—clad in polo shirt, khaki shorts, and tasseled slippers with no socks—appears in no hurry to return to the financial fray.

But Rainwater sees opportunities. "There's no telling how much money I could make going out and doing deals now," he says. But Rainwater just can't get excited. "I never had so much liquidity at such a time of great opportunity—and had so little interest," he says calmly. "I just feel the obsession or the passion to go out and do another deal or create another company. . . . After 30 years, I'm still in the deal business." Indeed, Rainwater's enthusiasms run from more to golf and such good works as financing a school for disadvantaged children in his hometown of Fort Worth. For four years, Moore, a former Chemical Bank executive, has been managing his billion-dollar investment portfolio. And since February, Moore and Rainwater's long-time partner, John C. Goff, have been handling new deals. But there's a problem: Rainwater's empire is a mess. His bets on three sectors—energy, real estate investment

trusts, and health care—"are all in the crapper at the same time," says pal Henry R. Silverman, chairman and CEO of Cendant Corp., though he feels that Rainwater's bets will eventually pay off. Since January, Rainwater says, his net worth has fallen 29% to \$1.2 billion. His real estate investment trust, Crescent Real Estate Equities Co., has pulled out of more than \$2 billion worth of deals since July, prompting lawsuits from two prospective partners.

STICK WITH IT. With his reputation as a rainmaker at stake, Rainwater is spending more time on damage control. He's turning up the heat on managers of his companies to cut costs. And after his wife asked for help, Rainwater has played a more direct role in managing his investments. "Darla doesn't have the skill set to manage in chaotic markets," he explains. One gets the sense Rainwater is trying to work less and play more, but he can't just yet. "I've always had this philosophy that if you start something, you stick with it," Rainwater says. "I'm retiring from doing any more deals, but I'm not retiring from taking care of the old deals that I'm still responsible for."

There's a lot of damage to undo (charts, page 114). Crescent, Rainwater's REIT, stumbled badly when it ventured from office buildings into gaming and health care; its stock price has dropped 44% from its 52-week high, to under \$23. Sister company Crescent Operating Inc. has plunged to under \$4, from \$24 at its initial public offering in June, 1997.

Depressed oil prices have battered shares at Pioneer Natural Resources Co., the successor to corporate raider T. Boone Pickens' Mesa Inc., which Rainwater rescued from the brink of bankruptcy in June of 1996. It has fallen 57% from its 52-week high, to under \$15. Ditto at oil-drilling firm ENSCO International Inc., down 71% from its high.

Rainwater's medical investments are in intensive care: Magellan Health Services Inc., which runs psychiatric hospitals owned by Crescent, is down 66% from its high, to \$10. Columbia/HCA Healthcare Inc., Rainwater's hospital company, has tumbled 37%, to under \$22. The company is the target of a federal health-care fraud probe. Even the stock

He's a legendary dealmaker. But his holdings—in real estate, energy, and health care—are headed downriver

RAINWATER

Can He Recoup?

of Fresh Choice, Inc., a 54-unit restaurant chain that Rainwater owns an interest in, has slumped this year, from 3 to 1½.

"Some of the magic that had been associated with Rainwater is gone," concedes Andrew A. Davis, portfolio manager of Davis Real Estate Fund in Santa Fe, N. M., which jumped into Crescent Real Estate Equities at its 1994 IPO. "It was a buy-the-guy play," says Davis. "We knew he had done some great things professionally. We respected his enthusiasm and intelligence." Davis still owns Crescent, but other investors are less forgiving. Says Michael R. Spohn, principal of energy-research company Petroleum Group Inc.: "I think [Rainwater's] halo has tarnished."

NOT SO BAD. For his part, Rainwater stands by his record. "People are correct in that we have made mistakes," he says. "But that happens all the time. There are some things we did at every company I've ever been associated with—Disney, Honeywell, company after company—that we wish we'd never done." Still, he says, "when I sit back and look at my results, I say the collective decisions I've made, from the time I started to date, appear to be sound. They have not been flawless...but they've created a lot of fortunes—not only for me."

That's for sure. Since leaving his money-management post for the oil-rich Bass family in 1986 to concentrate on his own investments, Rainwater says he has racked up a net annualized compounded rate of return of 26%. This year marks only the second time in Rainwater's career that his net worth will fall. And of the six companies in which he holds large stakes, Magellan is the only one that has fallen below his purchase price.

Taking a Big Hit

Rainwater's real estate, energy, and health-services properties, plus smaller ventures, slumped 29% this year

PROPERTY	VALUATION (IN MILLIONS)	
	11/17/98	1/1/98
CRESCENT REAL ESTATE EQUITIES	\$315.7	\$552.0
CRESCENT OPERATING CO.	5.0	28.6
PIONEER NATURAL RESOURCES	118.4	125.0
ENSCO INTERNATIONAL	100.3	276.2
COLUMBIA/HCA HEALTHCARE	180.0	244.0
MAGELLAN HEALTH SERVICES	27.0	63.5
SMALL VENTURES	160.0	401.0
NATURAL GAS PARTNERS*		
FRESH CHOICE Health-food restaurants		
RICHINA* China joint venture		
MONET GROUP* Costume jewelry		
STAUBACH* Real estate services		
CASH	300.0	
TOTAL	1,200	1,700

*Privately owned

DATA: RICHARD E. RAINWATER, BUSINESS WEEK

Nor was Rainwater ex blindsided by recent turmoil. In early 1997, he so worried that he moved shield the 40% of his net worth that wasn't tied up in his six public companies. The rry of activity included yann \$70 million out of hedge f and hawking private hold such as 50% of Dallas' Hotel Crescent Court and in the Texas Rangers bas team—the latter two m bringing in \$25 million ea **VERY LIQUID.** As a result, 18-month period culminat mid-1998, Rainwater went owing \$100 million to b debt free and sitting on million in cash, with a \$250 lion credit line to boot. "I so stupid because I saw train coming down the tr he says. "I'm not used to ing down years."

But he is used to ha into modest circumsta

THE AX-WIELDER

Wife Darla Moore h taken over half of the dealmaking for Rainwater—and mo the top-level firing

money, even though he was born into modest circumsta Rainwater's mother worked as a J.C. Penney Co. saleswoman. His father—of predominantly Lebanese origin with a touch of Cherokee Indian blood, hence the family name—joined a trading business founded by Rainwater's maternal grandfather, a Lebanese immigrant. Rainwater inherited his family's work ethic. "Part of Richard's cess," says Morton H. Meyerson, a Crescent director Rainwater investment partner, "is that he has this grant mentality of being very driven, working very hard really, really wanting to be successful."

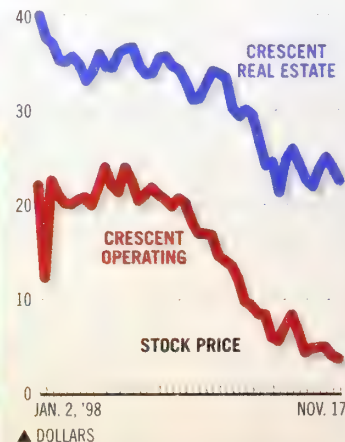
RAINWATER HOLDINGS

Three pillars of his empire cracked at the same time



REAL ESTATE

Stellar REIT Crescent found its worth eroded by a foray into casinos and a tricky sidestep into health care—and now it's pulling out of deals.



PION
OIL



practice spins, sometimes with Moore riding shotgun.

Moving quickly has always been Rainwater's style. His big break in business came early. A math and physics major at the University of Texas at Austin, he headed off to Stanford University's Graduate School of Business with only \$400 and a car to his name. But there he became fast friends with fellow Fort Worth native Sid R. Bass. And after a two-year stint as a Goldman, Sachs & Co. trader, Rainwater went to work for the Basses.

Cutting deals for the family, Rainwater concentrated on picking up shares in blue chips like Texaco Inc. and Disney when they were cheap. As a result, the Bass empire grew from \$50 million when he joined in 1970 to more than \$5 billion when he left in 1986. "Richard's

style has always been to buy when no one else wants

to buy and sell when everybody wants to get into it," says David Bonderman, who worked for Sid Bass's brother, Robert. "The crux of Richard is that he is one of the best value investors of all time."

HEALTHY PROFIT. Rainwater proved that again after leaving the Basses with his \$100 million nest egg. Rainwater's first solo deal, ENSCO International, is now one of the world's largest oil-drilling firms. Today, Rainwater's 6% stake is valued at more than \$100 million. The mother of all investment jackpots was Columbia/HCA. In the late 1980s, Rainwater surmised that the cost-cutting strategies that worked in other industries could be applied to health care. So, on Oct. 19, 1987, the day of the stock

Cover Story

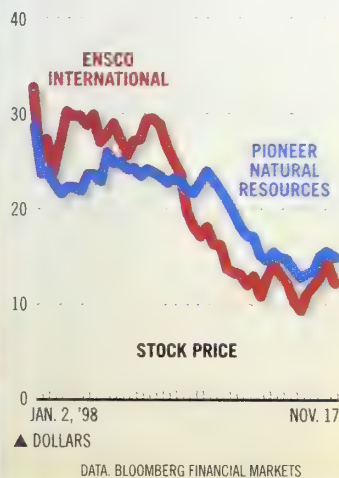
water likes to win—and it shows. He's a man who score. Since cutting back on his work two years ago, ter says he has exercised so religiously that his weight len from 225 pounds to 185 pounds and his body fat 7% to 19%. And he still brags about his drag-racing ex- pack in high school. Riding a souped-up Buick, Rain- says he set a record at a local raceway by going unde- nearly 30 weeks in a row. Rainwater still competes as od car owner and likes to take his dragsters out for

market crash, Rainwater launched Columbia Hospital Corp. with a rambunctious health-care buyout specialist named Richard L. Scott. Putting up \$125,000 each, they formed a partnership to buy two hospitals. Inside of a decade, the operation was the world's largest hospital company. By the time Rainwater left Columbia's board to concentrate on Cres- cent Real Estate Equities, his investment had grown to some \$300 million—a 2,400% return.

In 1991, Rainwater made one of his most important deals,

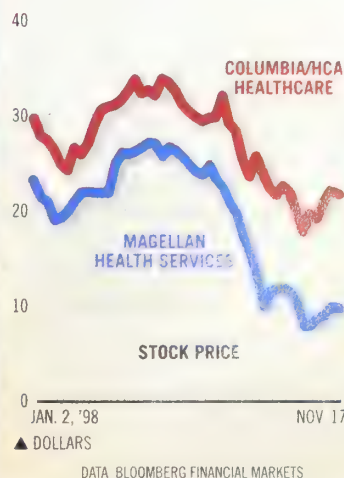
ENERGY

Rainwater's legendary loyalty extends to energy, which he believes must pay off in the long run. But low prices have shut off any short-run profit gushers.

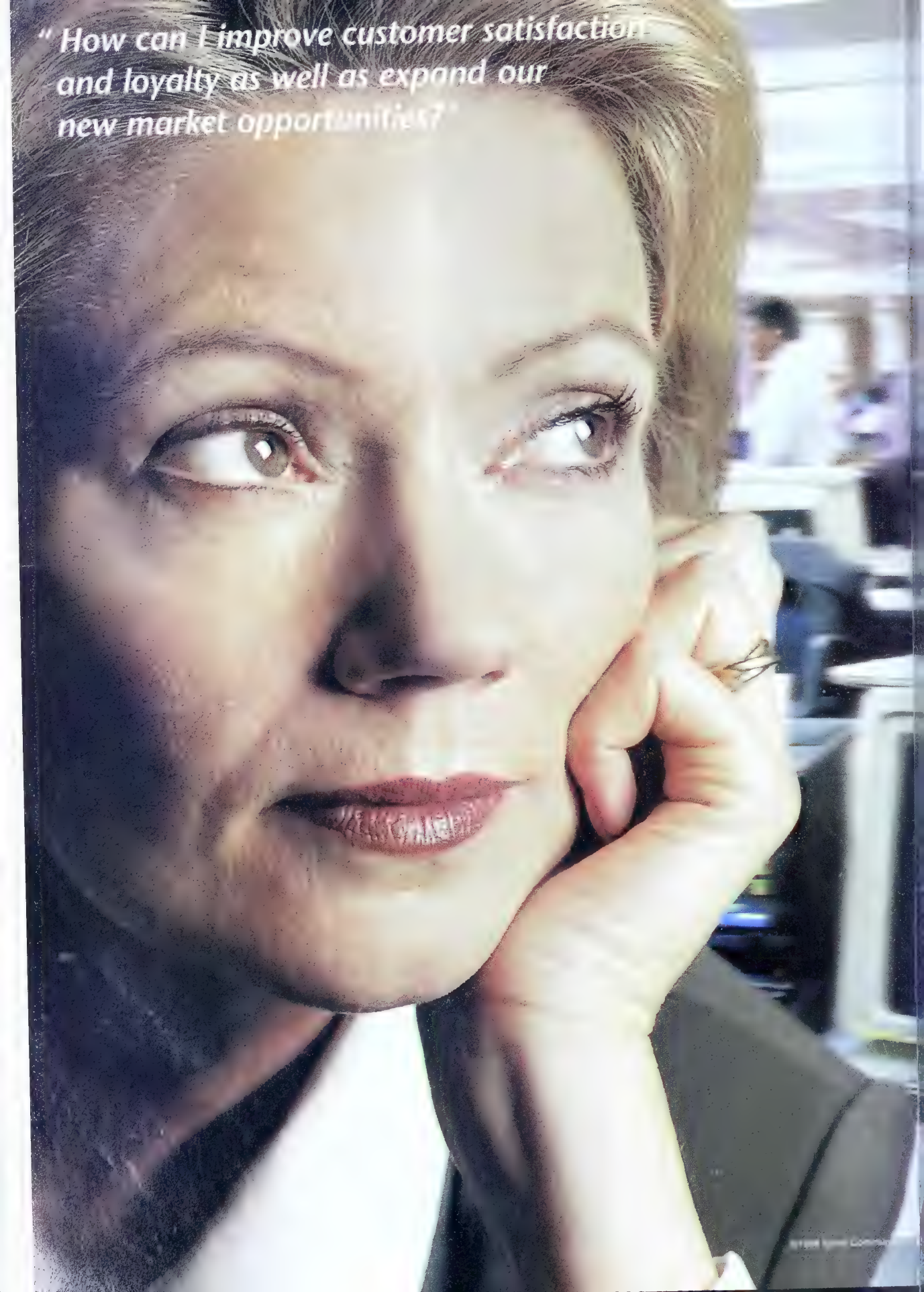


HEALTH CARE

Columbia/HCA is now the target of a federal investigation into health-care fraud, and its value has sickened significantly since the probe began.



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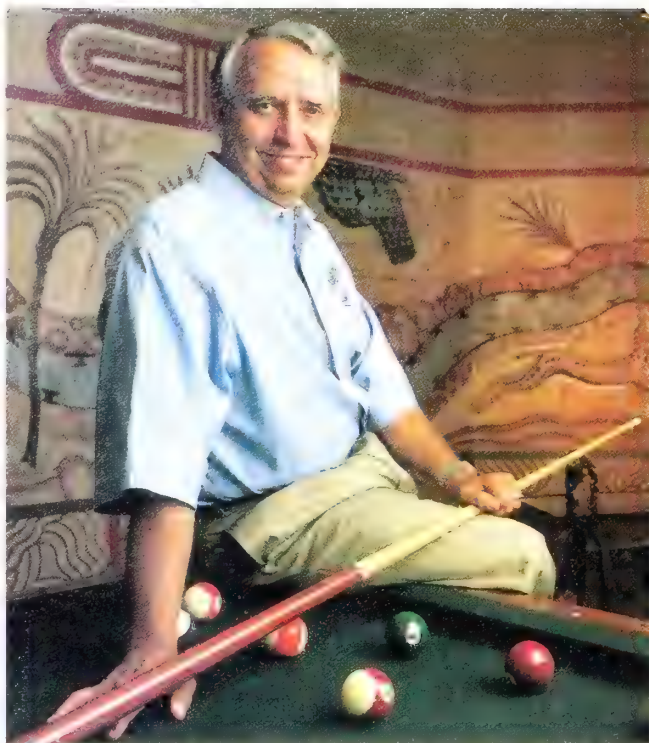
Expansion

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marrying feisty investment banker Moore. The couple shares an interest not only in business but in fitness and health foods (though when Moore returns to her native South Carolina she re-subscribes to the creed that "the meaning of life can be found in fried gizzards"). Their Manhattan condo features a floor-to-ceiling oil painting of Moore dressed as a Southern belle. And they are a playful couple, finishing each other's sentences and even debating in front of a visitor about whether Rainwater should give away his money before or after he dies. Moore says he should do it sooner rather than later so he can see the results.

Moore, 43, came into the marriage having made a bundle for herself by salvaging bankrupt companies for Chemical Bank in the late '80s. But now she does things the Rainwater way. "I'm learning at the foot of the master," says Moore.

Cover Story

When Rainwater stepped down from the Columbia/HCA board in 1994, Moore replaced him. Two years later, she left to become a director at Atlanta-based Magellan, where she and Rainwater had just bought a 12% stake. And since 1994, she has managed Rainwater's portfolio as president of Rainwater Inc.

BAD COP. Moore's emergence freed up Rainwater to look at the big picture. "I'd been working for over 25 years, and I'd made a great deal of money," offers Rainwater. "After you're successful and wealthy, buying another car or a house just doesn't do it for you, and you're left thinking, 'What now?' I thought I could keep making money or I could do something else with my life and let Darla begin learning how to play for me the role I once played for Sid Bass."

Moore jumped in with both feet, playing bad cop to Rainwater's good cop. It was Moore who helped Rainwater dismiss Pickens as CEO of Mesa. And after the Columbia investigation became public, she played a key role in helping Columbia's board oust Richard Scott—over Rainwater's objections.

When Rainwater stepped down from the Columbia/HCA board in 1994, Moore replaced him. Two

THE DEALMAKER

Longtime partner John Goff runs, with Moore, the newest vehicle for Rainwater investments

THE LEGAL SHARK

Lawyer Gerald Haddock found the loophole that allowed a REIT to provide health-care services

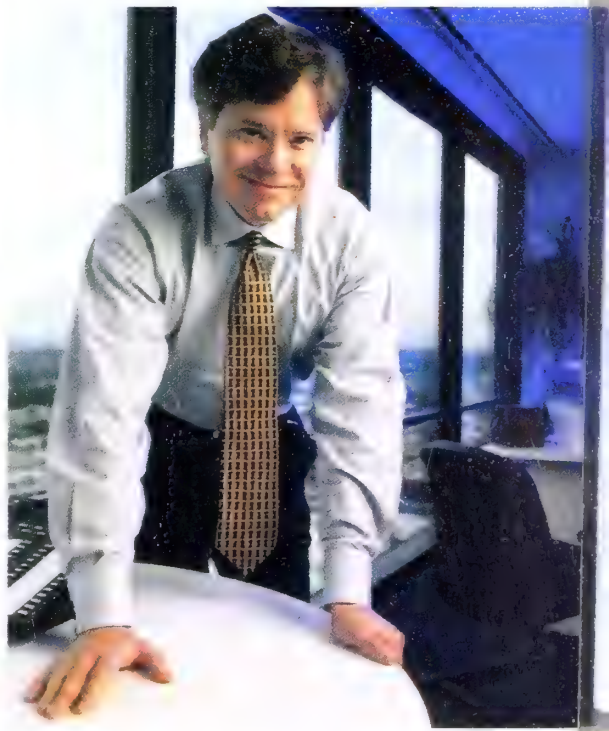
him. If that's the case, I said, let's go hire someone to deal with the government."

Such loyalty is quintessential Rainwater, say friends and associates. "Once he's behind people, he tends to stick with them for a long time—sometimes too long," Moore says in a wicked Southern drawl. "Richard is really conflict-adverse. On the other hand, thrive on controversy. I don't shrink from it. My knees don't go weak."

NOT BORED. Moore, in fact, says she enjoys the current challenge of managing Rainwater's money. "I pretty much sat for five years and watched the stocks go up every day, up every day, up every day. Ho hum, ho hum... Oh look, we've made another \$20 million. Oh God, that was so boring." Moore is having fun. "I love the carnage," she says. "The dead bodies are all over the street."

From here on, Moore and Goff will handle Rainwater's new investments through a vehicle named Goff Moore Strategic Partners. "I'm passing the dealmaking mantle on to John and John," Rainwater says. So far, Goff Moore has been moving slowly, buying oil and gas stocks, mortgage-backed securities, and high-yield bonds. "Things are still brutal," says Moore.

Rainwater found that out in the oil market. He maintained that rising global demand will push oil prices up to somewhere between \$20 and \$40 a barrel in two to five years. With crude hovering at \$13, Rainwater reckons OPEC miscalculated by failing to adjust to weak Asian demand. But he says that's a temporary development and he has sunk 20% of his fortune into the sector. "It takes an enormous amount of self-confidence to stick to your guns when everybody around you is saying it'll never work. But that's been the key for Richard," says Moore. "Nobody can talk



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into or out of something once he has made a decision."

Rainwater's Pioneer crew, led by CEO Scott D. Sheffield, is hunkering down. Having lost \$103.6 million so far this year, it laid off 350 employees and sold \$410 million worth of oil and gas fields in Texas and Oklahoma. And sources say more restructuring is coming. "Rainwater and Sheffield are making the right moves," says Leigh Goehring, vice-president at Prudential Investments, which boosted its Pioneer stake in October.

Crescent Real Estate Equities has its own set of troubles. Operating somewhat like a venture-capital fund, Crescent snapped up \$3.8 billion in assets between 1994 and 1997—everything from office buildings to cold-storage units and hotels—at deep discounts. Over the same period, its funds from operations—the best measure of REIT performance—soared nearly 370%. Its share price followed, rising 215%.



Crescent succeeded by buying mostly top-notch office buildings at fire-sale prices. Banking on an oil recovery, Rainwater picked up the bulk of these in the energy belt, particularly Dallas and Houston. Despite the fall in oil, Rainwater was right that local economic conditions would improve, and he was able to raise rents as a result. The problem was that as conditions stabilized, it became harder to find cheap properties—and Crescent began making riskier bets.

In January, 1998, for example, the company said it planned to enter the Las Vegas gambling biz by buying Station Casinos Inc. for \$635 million. Rainwater

opted to roll the dice after a 1997 Labor Day weekend spent in Vegas at a rock and roll revival. Buying Station, he says, was a safer way to play the game because it caters to locals rather than tourists. But investors thought Crescent overpaid. After its shares tanked, Crescent called off the deal in August.

REALTY RETREAT. Canceling deals, in fact, has become something of a pattern in the Rainwater empire lately. Only days after the Station debacle, a complex deal involving 90 psychiatric hospitals controlled by Rainwater entities came unglued. Crescent had bought the hospitals last year from Magellan. But REITs aren't supposed to own businesses with substantial nonrent revenues. So Gerald Haddock, a lawyer and close associate of Rainwater's, came up with a loophole

whereby hospital operations were put in the hands of Center Behavioral Health Systems (CBHS), a joint venture between Magellan and Crescent Operating.

Under the plan, Crescent Operating was supposed to share shares so it could buy out Magellan's 50% stake. But with psychiatric hospitals struggling, Crescent Operating called off the agreement. "CBHS has been a huge disappointment," says Joe Harvey, director of research at investment firm Cohen & Steers Management Inc., a large shareholder of both of the Crescent companies. "The bottom line is, Crescent guys missed it on this one."

On the property side, Haddock says Crescent is "struggling the table," trying to close a deal with Reckson Associates Realty Corp. of Melville, N. Y., to buy Tower Realty Trust, a New York REIT. However, in July, Crescent called off a

THE NEW FOCUS

Rainwater is financing a school and day-care center for disadvantaged children in Fort Worth

million San Diego deal. And in September, he backed out of a \$450 million purchase from Prudential Insurance Co.

"Crescent is reacting to changes in market prices and getting out of deals that no longer make sense to them," says analyst Peter Lutzus at Green Street Advisors Inc., a real estate investment firm. But it doesn't cut it with everyone. "You don't bust because market prices change," says Frederick Carr Jr., principal at

Penobscot Group Inc., a realty investment research company. "They could become known as a company that doesn't do deals, and that will hurt them."

But Rainwater says his concern these days is doing money rather than making it. In fact, he plans on giving away his fortune—after providing for his family and setting aside a \$120 million trust for Stanford and the University of South Carolina, Moore's alma mater. Rainwater's philanthropy is modeled on his business strategy. Spot a good program, help get it started, then move on. These days, he's funded some 100 programs, including the Fort Worth Save Our Children Learning Center. "Doing this, I could live the rest of my life getting up in the morning and saying, 'Boy, I've really done something worthwhile to do today,'" he says. "I don't really feel that way about doing another business deal."

Maybe. Rainwater, after all, still keeps score. Sitting on the floor of his condo with Doodle and Darla, he asks his wife, "I were enthusiastic and got up early and went to all my meetings and really pushed it hard, you think in the next five years I could add another zero to my net worth?" Moore says he could. Rainwater smiles and nods affirmatively. "Five years from now, I could have something like \$15 billion, huh?" Rainwater is thinking it over.

By Stephanie Anderson Forest in New York, with Kathleen Morris in Los Angeles, Amy Barrett in Philadelphia, Susann Rutledge and Barbara Silverbush in New York

Cover Story

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BROKEN TRUST AT BISHOP ESTATE?

Assets of \$6 billion may have been seriously mismanaged

When Hawaiian Princess Bernice Pauahi Bishop died more than 100 years ago, it was her dream to establish a school in Hawaii that would last forever. To that end, the Princess created a trust that included vast lands in Hawaii to which she was the sole heir. Today, the Princess' assets, called the Bishop Estate, are worth between \$6 billion and \$10 billion and include prime real estate in Waikiki and a 9.5% stake in Goldman Sachs. But her philanthropic trust—created to ensure that native Hawaiian children get a decent education—is being rocked by a slew of embarrassing allegations. On Sept. 10, State Attorney General Margery S. Bronster charged the estate's trustees with financial mismanagement, excessive compensation, and kickbacks. The five trustees deny any wrongdoing, but two are cooperating with Bronster. Two grand juries and the Internal Revenue Service are also investigating the estate. It's enough to make a princess weep.

Bronster also took the unprecedented step of asking the Hawaii Probate Court to immediately remove four of the five trustees and to place the trust in re-

ceivership to prevent further damage to the trust or its beneficiaries—the students of Kamehameha Schools, the ones owned and operated by the Bishop Estate. Probate Court Judge Colleen Hirai is expected to rule on the Attorney General's request in a few weeks.

Three of the trustees claim the investigation reflects the political motives of Governor Benjamin J. Cayetano. They say he used the trust affair to bolster his successful reelection campaign and take the electorate's mind off the faltering economy. "The Attorney General is clearly a political appointee," says trustee Henry H. Peters, a former speaker of the state House of Representatives. "She is only accountable to the Governor."

WEB OF PARTNERSHIPS. The trustees also include former State Senate President Richard S.H. Wong, Democratic Party politico Gerard A. Jervis, and Marion Mae Lokelani Lindsey, a well-connected former state education official. Of the five, the only one with any real business experience is Oswald K. Stender, a former chief executive of the \$2 billion Campbell Estate family trust in Kapolei, Hawaii. Stender and Jervis are

helping the Attorney General's in-

Bronster alleges that trustees about \$100,000 each in improper commissions to maintain their compensation levels in a year when estate investments performed poorly. And the estate, according to the Attorney General, paid off campaign debts for Hawaii legislators who have been instrumental in protecting the estate's interests. Bishop Estate attorney William C. McCorriston denied that trust funds were being used directly to pay campaign debts.

Much of the trust's portfolio is shrouded in secrecy and hidden within a Byzantine web of partnerships that include for-profit subsidiaries and holding companies. So it's no easy task to point the estate's performance. Trustees claim that from 1980 to 1996, the estate posted an annualized return on investments of 17.3%. That may be, but in recent years the record has been abysmal. According to a July 1997 Arthur Andersen & Co. report commissioned by the Probate Court and released in October, the trust's average annual return of only 2.4%.

Lately, things haven't been going well at the school, either. The Kamehameha Schools, with more than 30,000 students from preschool through 12th grade, has an annual operating budget



THE TRUSTEES: They say they've done better than other charitable trusts



THE ROYAL HAWAIIAN
IN WAIKIKI SITS ON
LAND OWNED BY TRUST

TROUBLE IN PARADISE

Two grand juries and the Internal Revenue Service are investigating Bishop Estate. The allegations include:

- ▶ Charges by the Hawaii Attorney General's office of mismanagement, excessive compensation, and kick-backs. The trustees deny the charges.
- ▶ One employee, a former state senator, charged \$21,000 on estate credit cards for bar tabs at strip clubs. He later repaid the money but only after he was issued a retroactive pay raise.
- ▶ A \$1.5 million investment in a software startup where a brother-in-law of a trustee worked went sour. An executive at that company pleaded guilty to money laundering.
- ▶ An Arthur Andersen report said that trustees ignored advice to diversify the trust's holdings into liquid equities.

DATA, COURT DOCUMENTS

she reimbursed the company for the flight.

The trust tried to make money in high tech. But it lost \$1.5 million in a 1997 investment in KDP Technologies, which planned to put actors' résumés and video clips on the Internet for casting calls. Randy Stone, the brother-in-law of estate trustee Wong, was a paid consultant to KDP. Estate attorneys say Stone, a movie producer, was a valid consultant. KDP's treasurer, Benjamin Franklin Bush III, was later convicted of money laundering and fraud.

The trustees still maintain the trust's performance is better than comparable charitable trusts.

ing to the school, of \$100 million. is at the hilltop campus, which oks Honolulu and the Pacific boast that more than 90% of ites go on to college. But that g statistic may be at risk: As the versy has heated up, teachers een departing. Last spring, the learned that its accreditation oe in jeopardy.

ie meantime, the salaries trustees have been on a. Selected by the State ie Court, the trustees re-mpensation based large-sliding-scale commission various estate income, g rent from properties valities. Annual paychecks have from \$30,000 in 1962 to well over 0 in 1997, making the trustees est paid at any educational trust ountry, according to the Attorney . But in May, in the face of grow-lic outrage, the Hawaii legis-lssed a law that would allow it to e trustees' compensation.

estate's fortunes began sagging early 1990s, when Hawaii real went into free fall, producing nancial setbacks. In a number land real estate investments, Estate got stuck with bad com-paper and took an equity stake ased the entire property rather

than foreclosing on the loans. Some of the investments have been recouped, but many have failed to turn around. The Arthur Andersen report found that the trustees repeatedly ignored the advice of outside advisers to diversify their holdings into liquid equities.

During the Attorney General's investigation, it was also discovered that a Bishop Estate employee, who is a former

They claim some of their investments—including the \$500 million put into the Goldman Sachs deal—were home runs.

HIGH SCHOOL PETITION. But such home runs could well turn into fouls. The estate's stake in Goldman, once estimated to be valued as high as \$3 billion, could now be worth only half that, because of the decline in financial stocks. The estate's 22% share in Peo-

Bishop Estate averaged annual growth of 2.4% from 1992 to 1996, says an Arthur Andersen report. Trustees, it says, often ignored their outside advisers

Hawaii state senator, charged \$21,000 on estate credit cards for bar tabs at strip clubs. The employee, Milton Holt, has reimbursed the estate but only after he was issued a retroactive pay raise. The Attorney General also alleges that a handful of prominent politicians and fiends of the trustees are on the Bishop Estate payroll in do-nothing jobs.

The estate, according to Bronster, awarded a \$3.4 million computer contract in 1994 to a company at the behest of trustee Lindsey, overriding staff recommendations. The company, Educational Management Group, flew Lindsey in a private jet to the 1997 Super Bowl in New Orleans. Her lawyer said

ple's Bank of California looked solid when it went public in May at 14%. It is now trading at \$10.

Half of the high school students at Kamehameha Schools have signed a petition to remove the trustees. The investigation and court proceedings could result in heavy fines or the revocation of the estate's tax-exempt status. And if the grand juries return recommendations to pursue criminal charges against some or all of the trustees, Hawaii's old-boy network would be dealt a crushing blow. The benevolent act of a princess has turned into a legal war in paradise.

By Alex Salkever in Honolulu

MUTUAL FUNDS

WHY FUND FEES ARE SO HIGH

A series of lawsuits points a finger at "co-opted" directors

High mutual-fund expenses can eat away at shareholder profits, and numerous lawsuits have tried in vain to force fund companies to lower their fees. But a series of suits filed in recent weeks attacks the fee issue in an unusual way—by challenging the independence of fund directors. The shareholder suits against Fidelity, Prudential, T. Rowe Price, BlackRock, and BEA Associates claim directors consented to high fees only after being "co-opted" by fund-management companies through high compensation and appointments to multiple fund boards within the same fund company. Directors "are no longer independent watchdogs," the suits contend.

Securities lawyers say the suits are a long shot. But they spotlight a highly charged issue that may prompt regulators and legislators in Washington to take action. The Securities & Exchange Commission recently launched a review of how directors set fees. And the chairman of the House Commerce Committee is considering proposing legislation next year that would require more detailed fee disclosure. **"BAD JOKE."** Fund fees have come to the forefront because critics believe that even though fund assets have quadrupled, to \$5 trillion, in the 1990s, the companies are not sharing the benefits of economies of scale with investors. After all, it doesn't take twice as many people, computers, or offices to run a \$2 billion fund instead of a \$1 billion fund. So as a percentage of the fund assets, management fees should fall as the assets increase. Instead, the average expense ratio for an equity fund is 1.53%, or \$1.53 per \$100, vs. 1.25% in 1985, according to Morningstar Inc.

Independent directors, by law, are supposed to represent shareholders. But critics say they do a poor job when they allow fees to rise. "Fund directors are, to a very major extent, sort of a bad joke," says John C. Bogle, founder of



Vanguard Group, which has the industry's lowest fees.

The recent suits follow a surprising court decision in May that opened the door for a legal assault on independent directors. In a suit in federal court in Maryland, Robert Strougo, a shareholder in Scudder Kemper Investments Inc.'s Brazil Fund, charged that a cozy relationship between independent directors and Scudder management led to the directors approving a rights offering that can dilute the value of the shares. At the Brazil Fund, four of the seven independent directors serve on other Scudder fund boards. Scudder moved to dismiss the case, but the judge allowed it to proceed, citing a

Maryland law that restricted directors from sitting on multiple boards. The case is still pending.

The decision prompted the attorney who brought the Strougo case to challenge that ruling to bring five new suits challenging fund fees. The suits claim the fees that were approved by directors are invalid because the directors serve on multiple boards within the same fund complex and are not truly independent.

LONG ODDS. The suit against Fidelity Investments contends that "the fee-gouging by Fidelity has been especially dramatic." Fidelity assets under management jumped from \$36 billion, to \$1.14 billion from 1985 to 1995, and management fees were increased from 1.08% to 1.14% on assets under management to 1.14% on assets. The higher fees resulted in an extra \$288 million in revenue for Fidelity, the suit claims. Fidelity has a board of directors representing 12 funds, 263 funds, and 9 of the 12 directors are independent. Fidelity's independent directors are paid in excess of \$200,000

One suit contends that "the fee-gouging by Fidelity has been especially dramatic"

year. "Our shareholders are well-served by talented and knowledgeable directors," says a Fidelity spokesman. "We are in full compliance with the Investment Company Act of 1940 and will defend ourselves vigorously." Representatives of T. Rowe Price Associates, Prudential, and BlackRock say they are without merit. BEA Associates could not be reached for comment.

Barry Barbash, former director of mutual-fund regulation at the SEC, says the suits have a slim chance if they win on the issue of directors serving on multiple boards. The SEC has been on the practice since at least 1970. Barbash, an attorney with Shear & Sterling in Washington, believes independent directors might not be as clear. "You might have a case, but you can show that independent directors are not in fact independent," he says.

The betting is that the latest attack on fees will fail. But the shareholders can still win if regulators begin to champion the cause of low

By Geoffrey Smith in

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BY GENE G. MARCIAL

A NEW GLEAM ON NEWMONT'S GOLD

Anyone for gold? Recently, gold stocks have reappeared on some investors' screens. "Incredible as it sounds, industry fundamentals—the cash flow and production costs—are improving, despite gold's stagnant price, so we've been loading up on certain stocks," says Vince Carino of Brookhaven Capital Management in Palo Alto, Calif. His top choice, based on fundamentals and a possible buy-

out: Newmont Mining (NEM).

Gold producers have been in a bear market since February, 1996, when the metal peaked at \$420 an ounce. This has "kept most investors cautious," says Michael Dudas, an analyst at Bear Stearns. He notes that, from peak to trough, the price of gold

itself has dropped 36%, while gold stocks have tumbled 70%. But now, he says, "gold is back from the depths."

Newmont, the top producer, with operations on four continents, will be a big winner if the price recovers, because the company hasn't hedged its output in forward contracts, says Carino. And even with the price of gold at less than \$300 an ounce, Newmont has upped its output from 3.9 million ounces to 4 million, with its production cost pegged at \$187 an ounce—equal to costs in 1997, he notes. Cash flow per share, he figures, has jumped from \$1.72 in 1997 to \$1.90 in 1998.

Carino expects the price of gold to rebound in three to six months as the gold supply stabilizes—after producing nations such as Russia and Korea complete their "panic selling." Once investors see a turnaround in supply and demand, gold stocks will push higher.

When such a change comes, says Carino, big producers that have hedged their output, such as Barrick Gold, will look to buy unhedged producers such as Newmont. Shares of Newmont hit

35% a year ago but fell to 13% in late August. They have since rallied to 22. He expects that if the price of gold recovers to \$400, Newmont stock will top its 1996 high of 60%.

WILL A EURO BUYER REV UP CUMMINS?

Shares of Cummins Engine (CUM) in Columbus, Ind., the top producer of diesel engines for trucks, power generation, and construction tractors, haven't been turbocharged. From a 52-week high of 69, the stock is down to 39. Earnings disappointments due to stiff competition have flattened the stock. "Weaker margins and deteriorating end markets could spell trouble for 1999," warns Tobias Levkovich, an analyst at Salomon Smith Barney, who has a hold-neutral rating on Cummins.

Yet some pros have been buying in. Bargain hunting? Well, yes—and they're also betting on fresh rumors that the company is up for sale. They maintain that a big European auto maker is interested in expanding its truck operations in the U.S. and that Cummins is the top target.

Eli Lustgarten of Schroder, a New York investment firm, who has a neutral rating on the stock, notes that "there have always been rumors about Cummins," but he doesn't give them much credence. Levkovich disagrees, he thinks Cummins is on several big companies' takeover target lists. Takeover or no, one investment banker maintains that, at its current price, Cummins is "awfully cheap"—considering its 10 price-earnings ratio, its book value of \$39, and its market leadership. He puts the value of Cummins stock, which hit 83 last year, at 50 a share.

Cummins, which posted sales of \$5.6 billion last year, derives nearly 50% of sales from the automotive (mainly truck) markets. Heavy-duty engines account for about half of automotive sales. Earnings in 1999 should dip to \$3.40 a share, figures Salomon's Levkovich, from 1998's estimated \$3.55. A

Cummins spokeswoman says the company isn't looking to be acquired.

MIAMI COMPUTER'S SALES HEAD NORTH

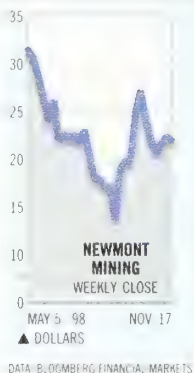
Miami Computer Supply (MCSO) in Florida (it's in Dayton), and doesn't sell computers. It sells 1,000 mundane items—such as computer cartridges, diskettes, and printer ribbons—to small businesses. What distinguishes Miami Computer is its sales, which have more than tripled in a year to \$325 million. And net income jumped from \$2.2 million in 1997 to an estimated \$7.2 million this year. Little wonder that Miami's stock has climbed from 8½ on Dec. 16, 1997, to 19½ on Nov. 17, 1998. Has Miami hit its peak?

Far from it, says Elliott Schlang, Lynch, Jones & Ryan, a research boutique in Cleveland, whose 12-month target for the stock is 32. He is encouraged that 49% of the stock is owned by insiders, who keep buying.

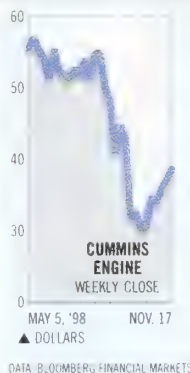
Schlang thinks Miami will be able to sustain its growth through internal expansion and acquisitions. In the five years, earnings have grown at a compounded yearly rate of 20% through internal growth. Counting acquisitions, Miami has grown at 56% a year, notes Schlang. Among this year's six buys is Canada's Axidata, with annual sales of \$150 million.

Miami CEO Michael Peppel says the deal will push up earnings as "it opens up Canada to our products." The company will "continue to make acquisitions as long as they are accretive to our earnings," says Peppel, who sells at least one more buy before year-end. Analysts figure Axidata will add 5¢ a share to Miami's earnings in 1999. Schlang figures Miami will earn 63¢ a share in 1999 and 79¢ in 1999 (excluding Axidata), up from 39¢ in 1997.

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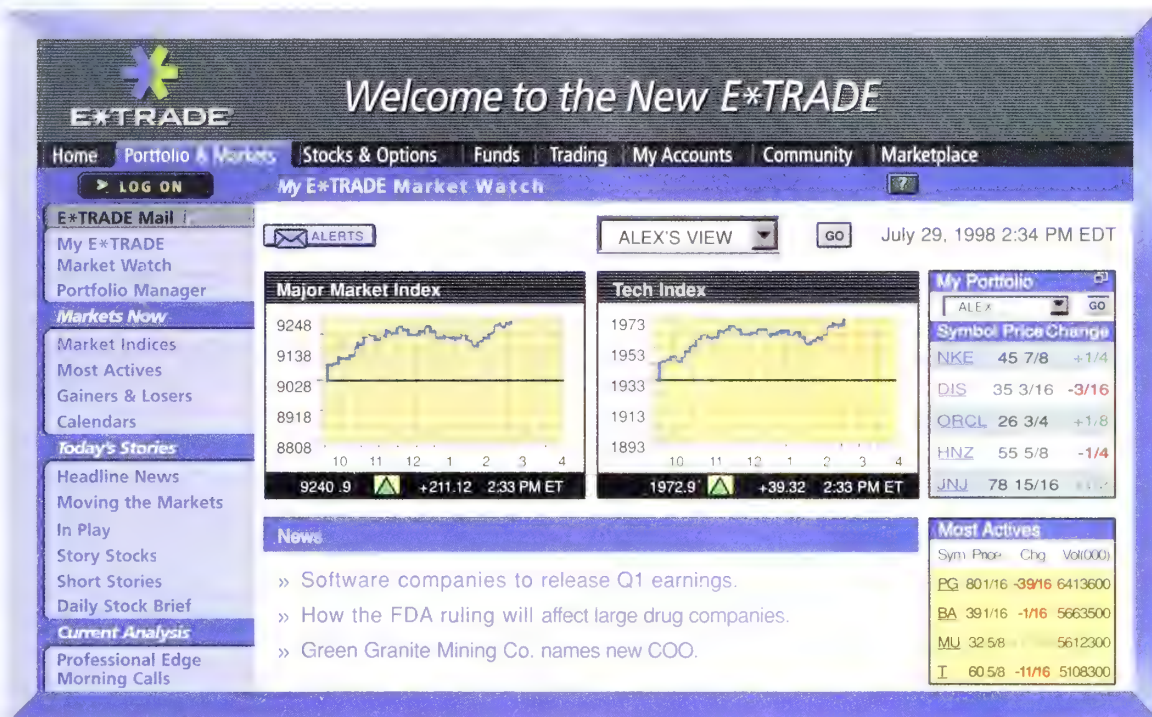


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IMAGES

TEFLON BILL

So far, the antitrust trial hasn't sullied the Gates "brand"

The allegations paint a picture of a modern day robber baron. Government trustbusters have accused William H. Gates III, the legendary founder of Microsoft Corp. and a billionaire 50 times over, of using his company's monopoly position in crucial computer software as a bludgeon to intimidate competitors and suppliers alike. But while Microsoft may be the Standard Oil of computing, Bill Gates is no John D. Rockefeller.

Like most high-profile trials, the antitrust extravaganza starring Bill Gates is being played out in two courts: the court of law and the court of public opinion. Rockefeller's 1906 antitrust trial left a taint over the industrialist that not even gargantuan philanthropy could fully mask. In contrast, the Bill Gates aura is so far undamaged. Indeed, viewed from some angles, his image—think of it as "Brand Bill"—may be actually enhanced by the verbal punchfest going on in Washington.

The Gates legend is by now familiar: He dropped out of Harvard at age 20 to found what became the most powerful software company in the world and amass the biggest fortune in America. His legions of admirers hail him as a visionary genius who can discern the far-reaching effects of technology long before anyone else—a reputation Gates has carefully cultivated with speeches and books such as his 1996 best-seller, *The Road Ahead*. Gates, who started out tinkering on a school computer, has come to embody one of America's most cherished archetypes: the self-

made entrepreneur who succeeded through sheer talent and ambition.

By most measures, the flesh-and-blood Gates has come off far less admirably in his videotaped performance at his company's antitrust trial. He squirms and hedges. He argues with prosecutors over

Has Justice unwittingly provided a forum that allows Gates to resume his long-lost role as scrappy underdog?

the definition of commonly used words including "we" and "compete." Rounds of his deposition show him giving obfuscatory answers and saying "don't recall" so many times that the presiding judge had to chide him. Worse, many of the technology company's denials and pleas of ignorance have been directly refuted by prosecutors with exhibits of E-mail Gates both sent and received. And it's far from over: The government has taped more than 20 hours of testimony from Gates, which it plays in snatches as the trial unwinds over the next two months.

But has the unflattering portrait caught on tape done anything to damage the carefully cultivated, near-mythic Brand Bill? So far, not much. Even as prosecutors try to drive home the notion that Gates is nothing more than an overgrown schoolyard bully, his popularity remains largely undented. In a recent *BUSINESS WEEK* poll, 32% of those surveyed agreed that Gates, a slight drop from the 37% favorable rating he got in June, before the trial began. But only 8% of those surveyed recently had an unfavorable view—unchanged from an earlier survey.

In part, that's because many Americans are paying attention. Despite intense media coverage of the trial, 54% of those surveyed said they were aware of his testimony. And the likelihood is that even those who have heard about it have seen his supposedly damaged performance themselves. **LIONIZED.** But perhaps more telling, many others who have heard or read about the testimony are making judges laugh as lawyers squawk about like what they see: Even those who are aware of the trial have a favorable view of the shifting, hench dodging Bill Gates. Legal experts don't expect the numbers to change. They say the trial, which examines whether Gates and Microsoft have grown too powerful, is unlikely to topple him from his status. After all, bill-



**MICROSOFT
ON TRIAL**

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the world's most powerful software company is what made him an icon in the first place.

So what has changed since Teddy Roosevelt's trustbusters went after Rockefeller? For one thing, by the time Rockefeller was in the witness chair, there had been 15 years of muckraking stories and state cases attacking him, says Ron Chernow, author of *Titan: The Life of John D. Rockefeller Sr.* And in spite of government investigations and rival complaints, Gates has been lionized in a way Rockefeller never was. Gates is the boy genius who helped get the U.S. out of the doldrums of the '70s when we worried if we could ever compete with the Japanese, says Chernow. "People associate Bill Gates with the resumption of U.S. technological supremacy in world markets," he says. "He's a heroic figure in that sense."

The resilience of the Gates aura also says something about America's sense of fair play. As Newt Gingrich and every

For Americans, big isn't necessarily bad. Big is safe. Big will be here tomorrow



other Republican who bet on the downfall of Bill Clinton can attest, public reaction to a man under fire is complex. Call it the rule of unintended perceptions. When Ken Starr succeeded in proving Clinton a liar, the President's approval rating soared, while the special prosecutor was vilified. Many Americans, it seemed, were repelled by the spectacle of a relentless government agent endlessly pursuing the President.

Something similar may be happening with Gates. Some see Gates as a victim of similar prosecutorial overkill. Already, 47% of people polled think the government is unfairly hampering Gates, versus

just 34% who think he has too much power in his industry. "Bill Gates showing the government for what? Our government is not about helping business, it's about exploiting it," Michael Branch, a Detroit doctor interviewed recently as he shopped for ware. "Gates built a better mouse. Leave him alone."

Indeed, in a perverse way, doing business with the government plays to all the strengths of the Gates legend. It lets him get back to his roots as a scrappy underdog willing to do battle with industry behemoths such as IBM. Ultimately, prosecutors may have provoked

BUSINESS WEEK/HARRIS POLL

THERE'S SOMETHING ABOUT BILL

There's nothing like a successful track record to persuade U.S. consumers—or voters—to overlook unsavory behavior. Although his court testimony has been so evasive as to leave the judge laughing, Bill Gates re-

mains an admired business figure. Even as government prosecutors drill into the practices of the company and the motives of the man, consumers still see many of the positive attributes of an American business hero in Gates.

WHO'S WATCHING?

Have you read about, heard about, or seen excerpts from Bill Gates's testimony in Microsoft's ongoing antitrust trial?

	TOTAL	MICROSOFT USERS
Read about it	16%	24%
Heard about it	19%	23%
Seen excerpts	11%	12%
None	54%	41%

HOW'S HE DOING?

Do you have a generally favorable or unfavorable impression of Bill Gates?

	NOVEMBER	JUNE*
Favorable	32%	37%
Unfavorable	8%	8%
Don't know	60%	55%

CHANGING YOUR MIND?

Over the course of Microsoft's trial, has your opinion of Bill Gates...

	TOTAL	MICROSOFT USERS
Improved	6%	6%
Worsened	6%	9%
Stayed the same	75%	81%
Don't know	13%	4%

DESCRIBE THE MAN

Which one of these words or phrases comes closest to your view of Bill Gates?

	TOTAL	MICROSOFT USERS
Entrepreneurial	32%	41%
Brilliant	28%	32%
Computer geek	13%	13%
Arrogant	10%	6%
Bullying	2%	3%
Don't know	15%	5%

WHO'S RIGHT?

Which one of the following statements comes closest to your opinion about Bill Gates and Microsoft?

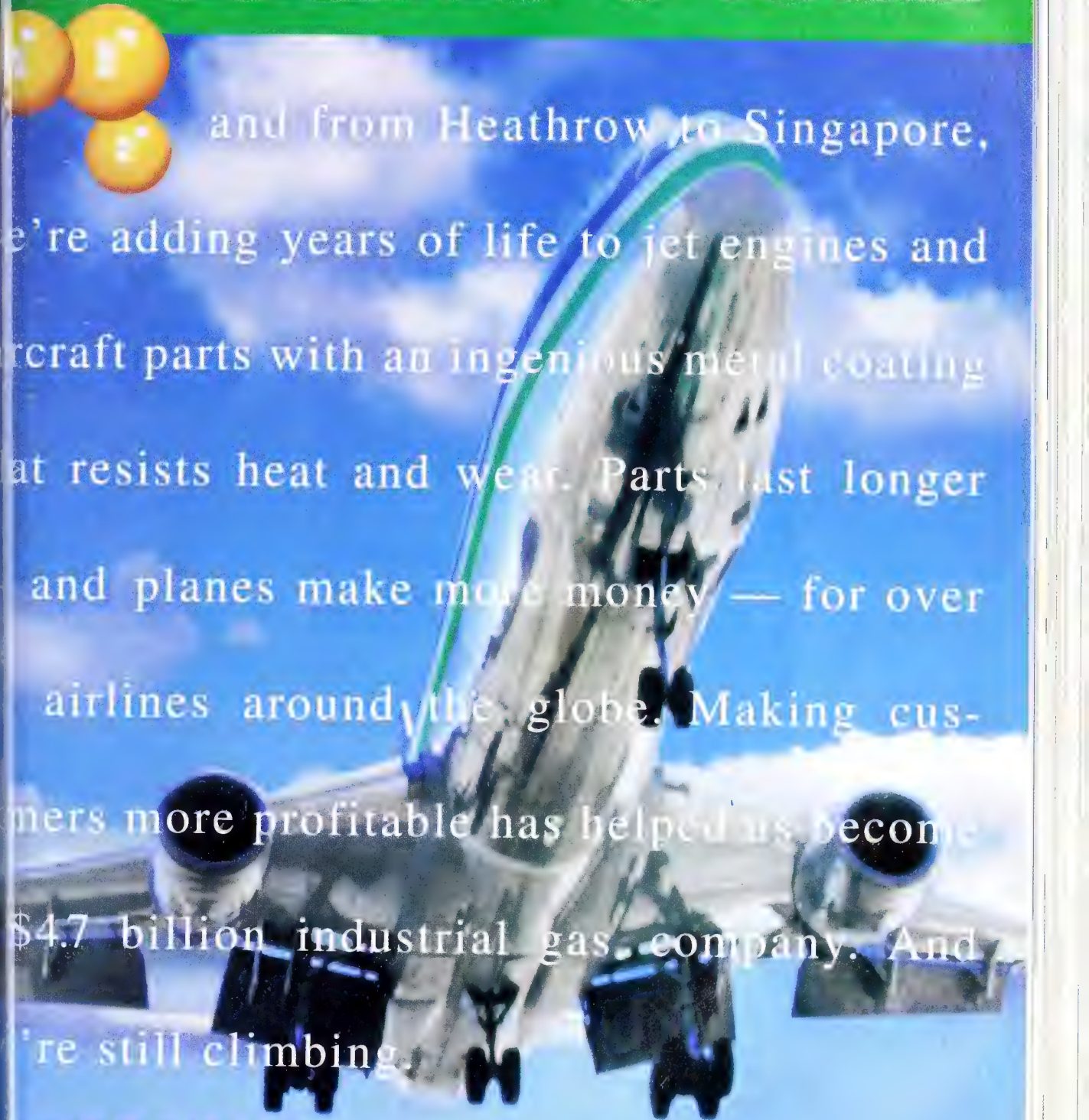
	TOTAL	MICROSOFT USERS
Bill Gates has too much power over the computer-software industry	34%	38%
The government is hampering Bill Gates's ability to compete freely	47%	53%
Don't know	19%	9%

EDITED BY KEITH H. HAMMONDS

Survey of 1,010 adults conducted from Nov. 11-15, 1998 for BUSINESS WEEK by Louis Harris & Associates Inc. 44% use Microsoft products.

*June '98 data from CBS/New York Times poll of 1,216 adults.

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Marketing

Gates with the one forum where he credibly take on the role of an underdog David battling an evil Goliath. "There are plenty of businesspeople out there quietly cheering: 'Go, Bill, go,'" says Howard Segal, an expert in crisis communications in Washington, D.C., standing up to the government."

AWE-INSPIRING. Then there's the stance of the government's communications. Image experts say the very attributes that have enraged government prosecutors are the ones that made Gates a hero. The charge that he is big and powerful inspires awe in Gates's admirers and security in his customers. "Big is good in this business. Big is great," says your company is going to be a force tomorrow when I need to call the line," says Alan Adamson, managing director for Landor Associates Inc., a marketing consultant firm.

Microsoft continues to exude confidence. "People are more interested in our products than they are in our briefs," says Chief Operating Officer Herb Klevorick. Still, there's clearly some work afoot to buff the boss's image. A move reminiscent of fallen financier Michael Milken's trips to the ballroom with disadvantaged schoolkids, the company has lately seen a big dose of the other side of Gates. Just like a dish detector that's billed as tough on grease and soft on your hands, the different facets of the Gates mystery are being showcased. At the Comdex show, Gates aired a self-deprecating video poking fun at himself. A week before that, a *Good Morning America* appearance interspersed references to the trial with shots of him reading to his two-year-old daughter.

Will Brand Bill's reputation slip? The trial is still in its early stages, and no telling how the ground could shift if the Justice Dept. wins its case. Whatever Gates's faults, he is a mate business hero and the world's successful baby boomer, with the exception of that other beleaguered executive, Bill Clinton. Executives around the globe troop to his headquarters in Redmond, Wash., hoping for a glimpse of how he does it. At public appearances, he's mobbed for his autograph. "This case will say a lot about who our heroes are," says W. Michael Hoffman, executive director of Bentley Center for Business Ethics in Worcester, Mass. Based on the evidence so far, people aren't going to let the government tell them who the bad guys are.

By Ellen Neuborne in New York
Steve Hamm in San Mateo, Calif.
bureau reports

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SOFTWARE

MEET MICROSOFT'S ENFORCER

Joachim Kempin rules PC makers with carrots—and sticks



HEAD DEALMAKER: Justice's case will put Kempin in the spotlight

Theodor Lieven doesn't mince words when it comes to Microsoft Corp. or Joachim Kempin, the company's chief negotiator with PC makers. Lieven, the former chief executive officer of German PC manufacturer Vobis Microcomputer, accuses Microsoft of using strong-arm tactics that prevented Vobis from selling software that competed with Windows. And

Kempin? He made an offer for licensing Windows that Vobis couldn't refuse. "What he said to us was: 'Take it or leave it,'" recalls Lieven. "What he meant was 'Take it or die.'"

Those are harsh words coming from the former CEO of a PC maker that relies so heavily on Microsoft software. But there may be more. In the next few weeks, the Justice Dept. plans to intro-

duce at least eight depositions from executives in the Microsoft antitrust trial, including statements from executives at Dell, Gateway, and Hewlett-Packard. The depositions are expected to open for the first time the complex, secretive relationships between Microsoft and PC makers who load their machines with Windows and other Microsoft software. Trustbusters are trying to show that Microsoft has taken unfair advantage of its monopoly operating software to extend its power into other markets—a charge the company denies.

Whether Justice will succeed is grist for water-cooler debate. But one thing is clear: Kempin, the 55-year-old executive who has quietly worked for years as Microsoft's PC dealmaker, will be in the spotlight. Not only will his negotiations be dissected, but the Justice Dept. is expected to grill Kempin when he appears as a defense witness next month. "The way Microsoft treats the PC makers is where the rubber meets the road in the raw exercise of their power," says Richard Gray, an antitrust lawyer in San Jose, Calif. He says the trial will be making a distinction between what PC makers have agreed to in their Windows contracts and any manipulations that aren't covered in the agreements.

NO INTERVIEWS. So who is this little-known Microsoft executive? In public, Kempin is called Bill Gates' "enforcer," a hard-driving German who spent a dozen years turning Microsoft's PC sales unit into a money-minting machine. One-third of Microsoft's \$1.5 billion in revenues last quarter came from sales to PC makers—fueled by royalties that analysts say average \$45 per copy for Windows 98 and about \$90 for Windows NT Workstation.

Intensely private, Kempin declines grant interviews. "He doesn't like the limelight," says Carl Gullledge, an advertising manager in Kempin's organization. Instead, Kempin spends much of his time jetting around the world to keep tabs on his vast network of PC customers. On the ground near Microsoft's headquarters in Redmond, Wash., he zips about in a Ferrari Maranello sports car. Fly-fishing is one of his few pastimes.

But Kempin hasn't had many moments to relax since he came to



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for Microsoft in 1983, after stints at the European operations of Digital Equipment Corp. and Apple Computer Inc. He made his mark as Microsoft's manager for Germany, then came to the U.S. in 1987 to run PC sales. He took over world PC company sales in 1991.

While others laid the basis in the '80s for Microsoft's ties with PC makers, it was Kempin who persuaded Compaq Computer, IBM, and others to install Windows on PCs before they shipped—which gave Microsoft the upper hand after its software became the dominant operating system. "He's the engine that drives the close relationships with the PC makers," says Craig Mundie, senior vice-president for Microsoft's consumer platform group.

With gray-blond hair and a creased face, Kempin comes across as more the rumbled college professor than the enforcer. He's anything but easygoing, though. PC executives who face him across the negotiating table say he usually dictates terms—softly, forcefully, with little compromise. "He's the guy holding the four aces," says a PC executive. "He doesn't have to make a lot of noise because he's got the winning hand."

Kempin's success is crucial to Microsoft. Once a year, he and the PC makers negotiate Windows' license royalties—based on expected volume shipments and the mix of U.S. and foreign sales. PC makers can get discounts of a few dollars per computer by adding features that take advantage of technology in Windows. And they get cooperative marketing money for putting Microsoft logos on their PCs, shipping boxes, and Web sites.

ANONYMOUS GRIPES. Microsoft gains a tremendous strategic advantage from these lopsided arrangements. Because of its iron grip on the basic software, it can fold new features into Windows and compel PC makers to adopt it rather than an alternative—thus beating back threats from rivals such as browser maker Netscape Communications Corp. "This guy deserves a big bonus," says Ken Wasch, executive director of the Software Publishers Assn., of Kempin. "He has got them quaking in their boots."

And gnashing their teeth. Few PC company executives will criticize Microsoft on the record, but anonymously they unload ample frustrations. Their latest gripe: Kempin isn't sharing their

pain. While consumer PC prices have dropped by half in the past year, Microsoft's Windows' pricing has held steady, and some PC makers complain that their royalty payments have even gone up—something Microsoft denies. One executive at a top 10 PC company says his price rose from \$53 for Win95 to \$60 for Win98. And Windows now accounts for 6% of the average cost of a PC, compared with 3.6% two years ago, according to Dataquest Inc.

To keep PC makers in line, Kempin makes liberal use of both the carrot and the stick, say PC executives. For instance, to help corporate users move from Win98 to the more expensive Win-

HOW KEMPIN CRACKS THE WHIP

Joachim Kempin, Microsoft's senior vice-president, manages the company's crucial relationships with PC makers. Here's how he does it:

PRICE BREAKS Kempin negotiates Windows licenses with PC makers once a year. Prices are based on volumes sold, but makers get a few dollars off each copy of Windows by using Microsoft's latest technologies. That keeps them aligned with the software giant's strategic initiatives—such as the universal serial bus (USB), which links peripherals to PCs. The USB was shipped as part of Windows 98.

BIG ORDERS Microsoft also sells mice, keyboards, and software applications to PC makers. While orders for Windows and other products are not tied together, PC executives say privately that they believe they get discounts for ordering a wide range of Microsoft products.

MARKETING DOLLARS Kempin persuades PC makers to promote Microsoft's technologies, such as Windows and the Internet Explorer browser, by offering them money for featuring its brands on their PCs, shipping boxes, and Web sites.



dows NT Workstation, he offers PC makers discounts if they increase the percentage of Windows NT-equipped machines they sell. One major PC maker says he was offered \$3 off every copy of Windows if 15% of his company's machines carried NT.

But if a PC maker strays, watch out. Consider Vobis. In 1991, Lieven began shipping large numbers of computers with Digital Research Inc.'s DR-DOS operating system. But he claims Kempin threatened to more than double his price for Windows if he didn't stop selling DR-DOS. Three years later, he held his ground on selling PCs with IBM's OS/2. He says Microsoft responded by not let-

ting Vobis test an early version of Win95 for three crucial months, threatening its ability to ship Win95 on time. "We had to give up," he says. Microsoft denies any wrongdoing and Vobis chose Microsoft's software, finding scant demand for DR-DOS.

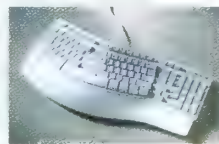
ALL CONTENT? Lieven admits that Kempin can be generous—but says it's if things are going his way. For example, Lieven says Kempin assured that it would be the first in Germany to get Microsoft's MS-DOS 5.0 software—dropped DR-DOS. And after the D victory, he paid Vobis roughly \$50,000 to make up for copies of software it paid for but wouldn't ship.

Win95 turned out to be a boon to most PC makers—driving a 25% unit sales increase that year, then 17% and 16% increases the two following years. So it's no wonder that some industry executives are genuinely friendly toward Kempin and Microsoft. James P. McDonnell, sales director for HP's commercial PC business: "The relationship between Microsoft and the PC makers is pretty positive now—though, of course, we'd love to see a deal on pricing."

That doesn't mean PC makers are content. They don't relish being commoditized. Their role has been reduced by distributing Microsoft software. So they search for ways to differentiate their products by including the latest advanced hardware or software add-ons. In September, Dell Computer announced new entry-level computers equipped with its own simple browser. "They haven't put any roadblocks," says Paul E. Penfield, senior vice-president for home and small-business groups.

Indeed, PC executives say Kempin has been allowing them a little leeway since the antitrust case was won. Still, they have to play by his rules and that rankles some of them. The government has asked Judge Thomas Penfield Jackson for a ruling that might give PC makers—not Microsoft—control over what customers see when they first start their computers. And you bet plenty of PC executives will be lobbying for government lawyer David S. Evans when he gets Kempin on the stand next month.

By Steve Hamm in San Mateo, Calif., with Gail Edmondson in San Mateo and Peter Burrows in San Mateo.



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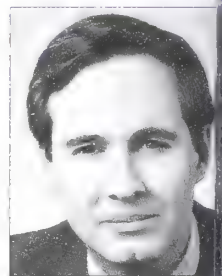
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COMMENTARY

By Marcia Stepanek

WHAT SMART CARDS COULDN'T FIGURE OUT

Last fall, when ushering in so-called smart cards on Manhattan's Upper West Side, Henry Mundt, executive vice-president of MasterCard International Inc., predicted confidently: "What we're doing today is launching a revolution. It will start here today and expand across the U.S."

The long-awaited test was the nation's first of digital cash outside the controlled confines of a company, military base, or college campus, where the cards are used for purchases and a host of other functions. But now, a year after Mundt's hopeful prediction, it's clear no revolution is in sight. Smart cards—plastic cards embedded with computer microchips that can store cash—didn't catch on in this three-square-mile neighborhood. Indeed, the 60,000 Manhattan residents who carried the cards spent about \$1 million using smart cards during the past year, just a fraction of total commerce. That prompted the test's four co-sponsors—MasterCard, Visa International, Chase Manhattan Bank, and Citibank—to announce on Nov. 3 that they will pull the plug.

The problem? Residents and merchants in this middle-class neighborhood saw no clear



ZABAR'S GOLDSHINE: *They're "a pain in the neck"*

Goldshine, manager of Zabar's Deli & Gourmet Foods: "There were two different types of smart cards and two different technologies—and four different companies behind it all. Bottom line? Smart cards are dumb. A pain in the neck."

Trouble is, they didn't have to be. Promoters might have had better luck if they had agreed to use a single technology, rather than each backing different kinds of smart-card systems. Many Upper West Side merchants refused to install more than one kind of smart-card reader.

or, frustrated, did not install either—despite being given demonstration models at no charge.

More important, the cards might have been more popular if they had done more than simply stash cash for store purchases. Midtrial surveys by

Citibank showed that consumers wanted to use their cards to ride the bus, take the subway, or make phone calls. In Manhattan, the only non-shopping use of the cards was also the most popular: laundromats—partly because users thought the cards provided a smidgen of security. "In some laundries, people without the cards couldn't use the machines. So cardholders felt safer, and the wait

to use the machines was shorter," says Walter A. Effross, an E-cash expert at American University in Washington, who monitored the experiment.

The wisdom of a smarter smart card should have been obvious. Just look at college campuses. At Florida State University, smart cards have been a hit because they've become practically indispensable: Students there use them to pay their tuition, eat in the caf-

eteria, borrow library books, rent videos, and gain access to dormitories and online study groups. In Europe and Asia, where the cards are popular, they often store not only money but also personal and corporate data such as medical histories and security clearances.

ONLINE REVIVAL? So what could turn things around for smart cards in America? Promoters should look to commerce, where there's a need for "smart" payment system that can accept small transactions without credit-card-size charges. Some companies already are headed there. Microsoft Corp.—just days after the Manhattan trial collapsed—announced it will unveil a smart-card reader for PCs early next year. And in a pilot with Mondex USA, an electronic-payments firm owned by seven banks, about 40 Wells Fargo & Co. employees in San Francisco have started tapping into the Internet to transfer funds from their bank accounts to their smart cards, then using the cards to buy low-cost items from online stores.

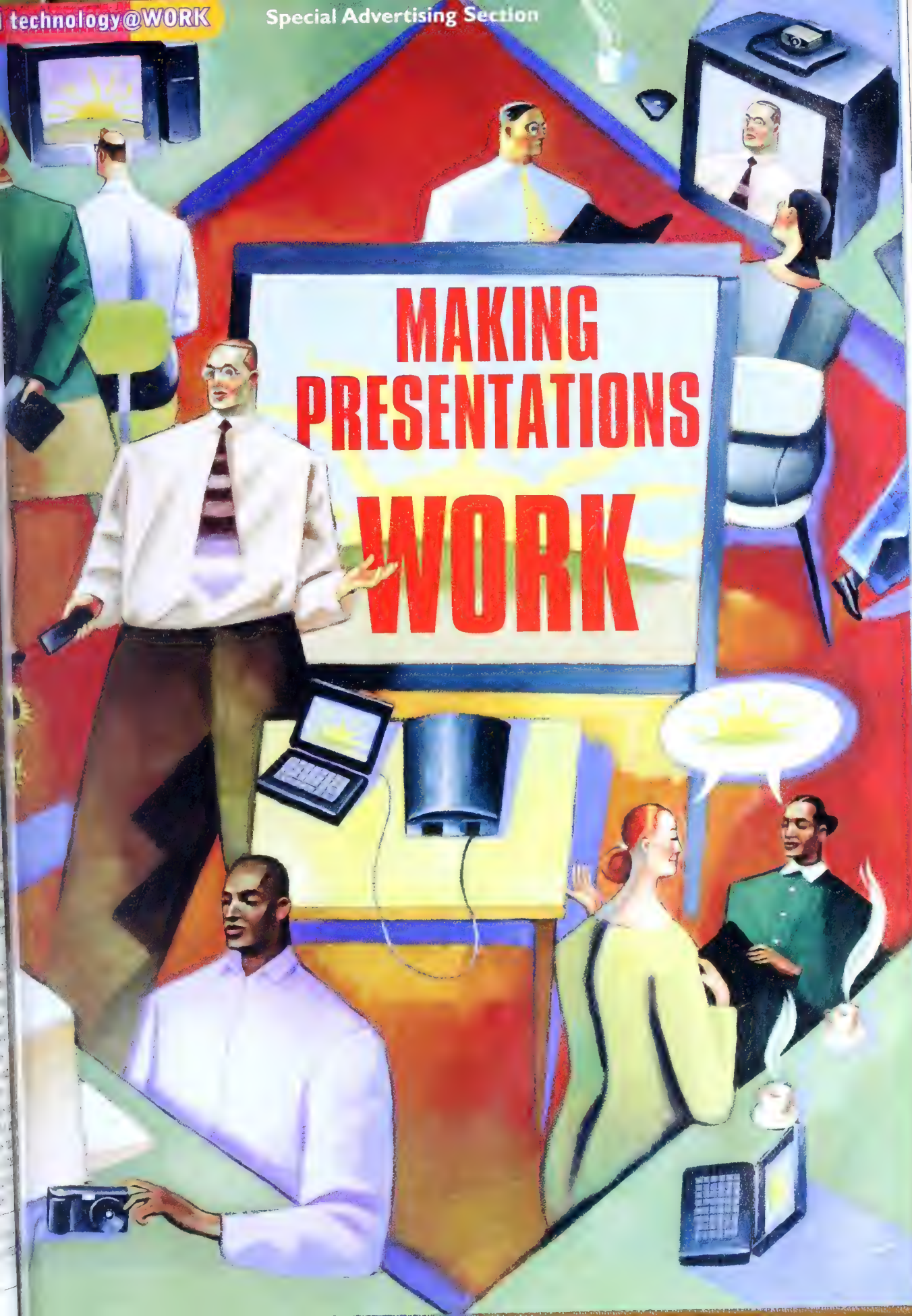
Whether or not E-commerce can give smart cards a jump start in America, the ultimate problem is not with the technology but with the ability of marketers to devise cards that consumers want and need. Until then, as Goldshine says: "There has got to be a simpler way to buy a bagel."

Stepanek covers information technology issues for BUSINESS WEEK.

In Manhattan, smart cards stumbled: Too many issuers, too many tech systems, and not enough uses

advantage to these cards. In addition to cash, shoppers handily use credit and debit cards, so why add another piece of plastic to their wallet? Merchants didn't like them, either. The smart-card machines were unreliable, and not all of the devices could process the varied smart cards. Of the 600 merchants who accepted the machines a year ago, fewer than 200 still have them today. Says Scott





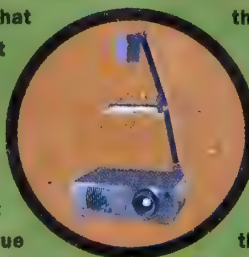
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TOSHIBA TLP-711 LCD PROJECTOR
2,000 ANSI LUMENS
XGA DISPLAY
BUILT-IN DOCUMENT CAMERA
VCR, DVD, COMPUTER INPUTS
WIRELESS REMOTE CONTROL
BUILT-IN LASER POINTER



In Touch with Tomorrow
TOSHIBA

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Toshiba America Consumer Products, Inc., 4100 Central Expressway, Santa Clara, CA 95051 • Toshiba Corporation, Visual Products Division, 3-1, Shinsuwa 1-chome, Minato-ku, Tokyo 106-8722, Japan. Printed in Japan.

Transport Your Audience More Efficiently

if you were setting out on a trip from New York to San Francisco, would you just step out the front door and walk west? Probably not. Yet every day, thousands of people present information to audiences using nothing more than the spoken word—the equivalent of a coast-to-coast stroll.

Any presentation is a journey; your audience starts at one place, travels through the information you convey, and you hope to convey them to a specific destination. If you stand up and start talking, it's as if you were asking them to walk 3,000 miles with you — and the

chances are good that some will drop out along the way, and end up some place other than where you intended.

According to Knowledge Industry Publications, studies show that the average person only remembers one-fifth of what

they hear. Visual images have been shown to improve learning by up to 400%. If you need to get your content across to your audience, you need to make your presentation visually engaging to help reinforce your spoken words.

So whether you're addressing colleagues about company operations, or talking to prospective customers about your products, or even working with a group of people to get them to reach a decision on an issue, make visuals a key component of your presentation to get your audience to your intended destination more quickly and effectively.

NEC Technologies Inc.

THE PROJECTORS PICKED BY THE PROS

How many digital projectors do you have in your company? One, two, or three, or maybe a dozen or so? Caribiner International (www.caribin-int.com) has a few more than 3,500 projectors, to be sure. And they're all MultiSync MT Series units from NEC Technologies. Caribiner is a leading, integrated business communications firm based in New York. In addition to a range of other services, the company provides audio-visual rental equipment for a variety of settings, including events for in-house ser-



NEC

MultiSync MT1030

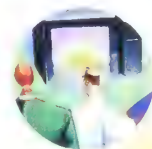
From sub-10-pound ultra-portable units to full-featured desktop units, there's an NEC MultiSync projector that will get the job done.

vices at 600 major hotels throughout North America. As a result, the company is picky about the projectors that they pick.

Stanley Egerson is the director of product management for rental, and he points out that it's not enough for a projector to be bright and have excellent image quality.

projectors to be dependable and reliable. And if we do have problems, NEC provides good support through their InstaCare 24-hour replacement program so the projector is back in service promptly." The NEC projectors provide flexible performance. "When a customer walks into a meeting at one

In order to survive in the rental market, it also has to be durable. "It doesn't matter what other advantages a projector might offer; if it doesn't work, we can't rent it. We can count on our NEC MultiSync



"It doesn't matter what other advantages a projector might offer; if it doesn't work, we can't rent it..."

of our hotels — with either a laptop or a video tape — we know that the projector will be able to display the image well," reports Egerson. Other projectors may be particularly good at one task, but in evaluations at trade shows, in-house testing, and in the field, Egerson and his colleagues have found that the NEC projectors provide the best all-around performance. He notes that Caribiner has acquired a number of audio-visual rental companies in recent years, and those companies had also selected NEC as their projector of choice. You may not have a need for thousands of projectors, but whether you need a hundred of them or just one, you'll want the same flexibility, ease of use, dependability, and reliable support — along with bright images and excellent picture quality — that you'll find across the NEC Technologies projector line. From sub-10-pound ultraportable units to full-featured desktop units, there's an NEC MultiSync projector that will get the job done.

NEC Technologies, Inc.
Itasca, IL
800-NEC-INFO
www.nectech.com

Beat the Clock

A presentation that's too short for the allotted time is almost as bad as one that runs way too long. Run through your presentation a few times — not to memorize it — but to make sure that the timing is about right.

Epson America

PUT POWER IN YOUR PRESENTATIONS

For a presentation that packs a punch, you want vivid, detailed images that fill the screen with color. Two new products from Epson deliver the power to get your message through to your audience. Clip art and generic photos don't have the impact of custom images, and you can easily make your own with the PhotoPC 750Z digital camera. The camera can create 24-bit full-color images at resolutions up to 1600 by 1200, and stores them on a convenient 8MB CompactFlash removable memory card. The 3x optical zoom glass lens gives the equivalent of a 35-105mm zoom lens on a standard 35mm camera, and

an interlocked zoom or optical viewfinder gives an accurate preview of image before you take it.

You can use the active matrix color LCD on the back of the camera to check out your picture before or after you take them. A solar energy cell on the camera provides power for the LCD, extending battery life. The camera comes with four rechargeable batteries and a portable charger, but you can use any AA batteries. And you send your pictures to a computer via a cable connection, to a television using a video connection, or print them directly on color Epson ink jet printers without using a computer.

Once you have the pictures in your presentation, you'll want your audience



Epson
PowerLite 7500C The projector comes with a remote control that includes mouse functions, as well as stereo sound, and inputs for computer and video sources.

It's the world's smallest projector. Period.



The new In Focus® LP425. The small projector that looks great—even with the lights on. For a free demo: www.infocus.com/avb or 1-800-294-6400

The projector that won PC Magazine's Editors' Choice Award just got brighter—the new In Focus LP425 personal projector. It fits in the same bag with your notebook and has 700 lumens of brightness, yet weighs just 6.8 pounds. And, as the industry leader, we've got a full line of projectors to choose from, including this—the world's smallest.

InFocus
Project yourself.™



Cool.

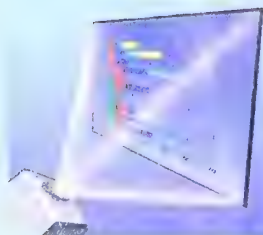


Cool *and* Silent.*



The Hopper.

The first fully featured ultra portable Multimedia Projector.



Please visit our booth at Comdex (#L2625)

Now you can keep the focus on your presentation and not on a noisy cooling fan. The Hopper performs silently - four times more silent than its nearest competitor*. To find out how you can present, pack and go with the coolest projector around, visit our web site at www.philipslcd.com or call today
Tel. 1-800-504-9978

* Based on Natlab test, august 1998 at 33dB(A)



PHILIPS

Let's make things better



Epson

PhotoPC 750Z Create 24-bit full-color images at resolutions up to 1600 by 1200.

appreciate the rich colors without having to turn off the room lights. That's where the new PowerLite 7500C comes into play. Weighing 9.4 pounds, the projector is rated at 800 ANSI lumens — brighter than any desktop projector. The 7500C uses a lamp with the same 120 watt rating as used in other projectors, but Epson has found a way to get more light from the lamp and onto the screen. Each cell in the 0.9-inch XGA (1024 by 768 resolution) LCD panel has a microscopic lens attached to the back layer. These tiny lenses catch the light that would otherwise be lost by passing through the opaque portions of the panel, and bend the lenses so that they pass through the transparent part of the cells. Tiny metal dividers between the cells also reduce light loss and cross-talk to further improve image quality. The PowerLite 7500C has Epson's SizeWise technology to scale up VGA and SVGA images, and scale down SXGA (1280 by 800). The projector comes with a remote control that includes mouse functions, as well as stereo sound, and

inputs for computer and video sources.

Epson America
Torrance, CA
800-GO-EPSON
www.epson.com

In Focus

PROJECTING A BETTER IMAGE

What would you do if you were about to open a 1,000-seat telephone call center, and you had to train staff not just to sell your company's products and provide technical and customer support, but also train staff to sell and support outside client products as well? If you are Tom Anderson, with CompUSA, you'll pay special attention to the training and meeting room facilities. And a key component in the whole operation is a series of In Focus digital projectors.

CompUSA's nine training rooms are filled almost constantly. In the past, trainers relied on overhead projectors and transparencies to deliver the content, but they were cumbersome to handle and did not add much zing to the presentations. Anderson has found that the use of projectors has led presenters to make their images more creative and engaging, which in turn makes both staff training and client prospect meetings more effective. Even outside vendors who come in to conduct training on their products have started to take advantage of the multimedia projection facilities for their presentations. The nine training

rooms are outfitted with In Focus LitePro 420 portable projectors. Small and unobtrusive, the 420s still project images bright enough that the room lights can be left on, making it easier for the staff to take notes during the training sessions, and for subtle details — such as instructor facial expression and body language — to help keep the participants focused on the material.

When prospective clients are brought in to tour the facility and hear about the offered services, the schedules include sessions in the two executive briefing rooms, where In Focus LitePro 725 projectors display bright images on rear-projection screens. The presentations include a mix of graphics and photographs, and the end result is that the prospects come away impressed with the company's operation. "Quite a few people comment specifically about the projection sys-



"They are impressed by the bright, crisp and clear images..."



In Focus Training Application Even outside vendors who come in to conduct training on their products have started to take advantage of the multimedia projection facilities for their presentations.

tems," according to Anderson. "They're impressed by the bright and crisp and clear images. "The client briefings work so well that CompUSA has purchased an additional pair of In Focus projectors to take on the road for presentations at client sites, and has two more on order. With a digital presentation, they can easily update or modify images at home or on the road. By making just a few changes, their sales staff is able to create a presentation that is customized specifically for the individual client. For small briefings or large groups, at the home facility or in the clients' offices, In Focus projectors are helping CompUSA get the message across.

In Focus
Wilsonville, OR
800-294-6400
www.infocus.com

Be Sparing with Special Effects

Variety may be the spice of life, but don't create a multimedia stew that is so spicy that it's difficult to consume. Current presentation software makes it easy to add everything from animated text to sound tracks to clips from movies, but just because you can doesn't mean that you should. Only add visual or sound effects where there is a good reason to use them, or else they can be distracting or even annoying to the audience. A surprising effect here or there in a presentation can be much more effective at adding interest and emphasis to your content than a steady stream of flying words and swirling sounds.

Philips Electronics

THE SOUNDS OF SILENCE

Perhaps you've experienced this firsthand. You sit down in a conference room next to a typical LCD projector and, as the presenter gets ready to start, the projector is turned on. All of a sudden, you think you're seated next to a small jet aircraft with its engine aimed right at you! The drone of the fan makes it difficult to hear the presenter's voice, and even more difficult to concentrate on the content

projectors provide less noise and weight for cooling components such as fans.

The engineers at Philips Consumer Electronics tackled this problem head on, and the first product to benefit from their efforts is the new Hopper SV10 portable projector. At just over 12 pounds, it is light enough to take anywhere. And when you start to make your presentation, you won't have to shout to be heard; the Hopper SV10 runs at just 18 decibels, which is much quieter than the background



Philips LIMESCO

LIMESCO technology allows the Hopper SV10 to display images from VGA (640 by 480) to SXGA (1200 by 1024). At just over 12 pounds, it is light enough to take anywhere.

of the presentation.

The ideal projector should make no more noise than a laptop computer. It should blend into the background of the environment, and not be a noisy and distracting intrusion. Yet as projector manufacturers strive to make their products lighter and brighter, the noise problem gets worse. Brighter images can require brighter lamps, which generate more heat. More heat can affect the image quality of the sensitive liquid crystal panels inside the projector, so the entire system must be well ventilated. Smaller and lighter

noise level in an average office, and about as quiet as the average home living room. This is also at least 10 times quieter than compact projectors.

How can this projector be so silent? Philips engineers have designed the Philips Air System (PAS) which circulates cooling air past the 0.1mm poly-silicon LCD panel and the lamp along separate paths. This provides more efficient and efficient cooling without moving the air a short distance. And heat sensors within the projector automatically adjust the speed of the fan

YOU'VE GOT TO SEE IT IN

EPSON

COLOR.

HERE YOU
SEE HER
EVERY
GOLDEN
STRAND
OF HAIR.

HERE YOU
SEE THE
PROJECTOR
THAT WEIGHS
LESS THAN
SHE DOES.

Just like her, this incredible projector can easily hold an audience. Because instead of having only one imaging processor like other ultraportables, the PowerLite™ 5500C was born with three – for the brilliance of a large projector, without the bulk. In fact, at 650 ANSI lumens and only 9 1/2 pounds, this little baby will have everyone going ga-ga.



Epson PowerLite 5500C

THE NEW POWERLITE 5500C ULTRAPORTABLE PROJECTOR. 3 LCDs BRIGHT - 9 1/2 LBS LIGHT.

Epson®, the world leader in high-performance portable projectors, brings you a full-featured ultraportable with: Exclusive SizeWise™ technology that allows compatibility with computer resolutions up to 1024 x 768 • Zoom lens, remote control and amazing SRS 3D sound • Dedicated phone support and RoadService exchanges, usually within 24 hours.

For more information or a free video on Epson's award-winning line of projectors, call 1-800-442-1977 (ask for Oper. 3118) or visit www.epson.com.

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For More Information Circle Free Product Info No. 85

Canon's Breakthrough Technology Maximizes Your Projector's Output.

Unretouched image
of the area below
President Grant's
beard on a \$50 bill,
taken with
Canon's DZ-3600U.

Our New Digital Document Camera Revolutionizes Presentations With Exceptional Price/Performance.

In a matter of seconds, Canon's DZ-3600U can capture a high resolution digital image (1900 x 1424 pixels) from a critical chart, spread sheet, entire 8 1/2" x 11" document (legible to 8 pt. type), 3-D object or 35-mm slide, for quick integration into your presentation. Now, projector users can maximize their high resolution output, while displaying image quality and detail that compares to a 3-CCD camera.

Incorporating Canon's breakthrough Parallel Plate technology, the DZ-3600U makes

high-resolution, detail-sensitive imaging affordable, by making one CCD do the work of nine. Intricate details, invisible to the naked eye, (1600x zoom magnification) are captured and displayed to the back row (without constantly zooming in), or transmitted across your network anywhere in the world.

The DZ-3600U features a Universal Serial Bus (USB), for instant 'plug and play' with any USB compatible PC, and incorporates all the most-wanted features you've come to expect from Canon's imaging tools.



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Website @ <http://www.usa.canon.com>

Canon

VISUAL COMMUNICATION SYSTEMS DIVISION

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needed so that they run as
tly as possible.

he Hopper SV10 has a
e resolution of 800 by
(SVGA), but the Philips
SCO technology allows
display images from VGA
by 480) to SXGA (1200
024). The Philips 120
UHP lamp is rated for
0 hours with virtually no
in light output, and pro-
an image rated at a
t 600 ANSI lumens. It is
it enough and light
gh to take on the com-
on, but it sets a new
ard for quiet operation.

.....
s Consumer
onics
a, GA
04-9978
philipslcd.com

Where's the step where
you fish about in your carry-
ing case for the right cable to
connect the projector to the

resize images from VGA (640
by 480) to SXGA (1200 by
1024). The projector is easy
to set up, thanks to manual



Sharp Notevision5

Sharp Notevision5 comes with standard features missing from competing models. A full featured remote control, a wireless mouse receiver to attach to your computer, and cables for PCs and Macs to connect the projector directly to the computer.

Electronics

RELEASES ORDER

alk confidently into the
g room, plug your Sharp
ision5 into an electrical
boot up your laptop,
art your presentation.
wrong with this picture?

Where You're Headed

resentation is a trip —
or it's a five minute sales
report or a day-long lec-
and you're asking your
ce to come along with
e least you can do is let
now where you're taking
The old adage says to
em what you're going to
y it, and then tell them
ou told them." So start
telling them what the
your message is, so
an know when they've
d the destination.

laptop? What happened to
fumbling with the portable's
hatches to find the right con-
nector for the cable? It's no
mistake; you can skip those
steps with this projector.

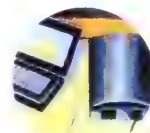
The Notevision5 actually
lets you transmit images
from your computer to the
projector using an invisible
infrared connection, using
Sharp's IrCOM feature. In
fact, you can also use other
devices with IrDA ports to trans-
mit images, including hand-
held PCs and digital cameras.

At about 10 pounds, the
Notevision5 is light enough to
go anywhere, and its bright
image is rated at 600 ANSI
lumens. The three-panel 0.9-
inch polysilicon LCD panels
have a native resolution of
1024 by 768 pixels (XGA),
and Sharp's ImageACE tech-
nology can automatically

focus and zoom on the lens,
and a digital keystone cor-
rection feature that pre-
serves the perfect shape of
the image. An autoSYNC
feature also adjusts to the
incoming signal, automati-
cally sizing and centering the
image and eliminating jitter.

The Notevision5 also
comes with standard fea-
tures that are missing from
some competing models.
You get a full-featured remote
control with backlit buttons,
including remote mouse
functions. There's a wireless
mouse receiver to attach to
your computer, and cables
for PCs and Macs if you want
to connect the projector
directly to the computer.

The projector has two
computer inputs, plus a video
input that accepts either
composite video or S-Video



"At about
10 pounds,
the Note-
vision5
is light
enough to
go any-
where..."

signals from VCRs and video cameras. And the projector even has a feature that lets you place your own company logo or other information on the screen when the projector is not receiving an image signal.

Light, bright, and able to get images from your computer without a cable, the Notevision5 makes portable presentations easier and better than ever.

Sharp Electronics Corporation
Mahwah, NJ
888-LCD-SHARP
www.sharp-usa.com

Toshiba America

BRIGHTNESS BREAKTHROUGH

The larger your screen, the more light you'll need to project an image that's bright enough to view with the room lights turned on. Most portable projectors are bright enough to fill a small screen which is fine if you only have a few people in your audience, but for larger groups you need larger images. And you need a brighter projector — like the new MediaStar TLP-710U and TLP-711U models from Toshiba.

Most of the light that comes from an LCD projector's lamp never reaches the screen; it gets lost along the way. These new projectors use Micro Lens Array technology which places a tiny lens behind cell in their three 1.9-inch polysilicon LCD panels. The lenses focus the

light from the projector's lamp, and pass more of it through the transparent portion of cells, avoiding the opaque portions that would block the light.

This technology produces projectors that are roughly twice as bright as models of similar size and weight. The TLP-710U and TLP-711U are rated at a brilliant 1,400 ANSI lumens — bright enough for a 25-foot image for large audiences — yet they weigh under 15 and 20 pounds respectively.

Both projectors have 1024 by 768 pixel (XGA) native resolution, though they are capable of displaying compressed SXGA (1200 by 1024) and UXGA (1600 by 1200) resolution images using Toshiba's T-ForcMK2 technology. They are also ready for digital television and DVD, supporting both the traditional 4:3 aspect ratio images and the new wide-screen 16:9 formats. The projectors have inputs for both data and video signals.

The MediaStar TLP-711U adds a color document camera to the projector. Its 840,000 pixel camera can send images of paper or small three-dimensional objects to the projector for display. The camera also swivels 360 degrees, so you can also use it to show large items, such as wall charts or objects. It can even be used for teleconferencing applications.

The projectors come with many other features, including a multi-function remote control that includes wireless mouse and laser-pointer functions, so you can run your entire presentation from



Toshiba

TLP-711U A brilliant 1,400 ANSI lumens bright enough for a 25-foot image for large audiences

a single device.

If you don't want to lose your audience in the dark, your next presentation, you'll find that Toshiba has a big idea with the new MediaStar TLP-710U and TLP-711U projectors.

Toshiba America Consumer Products
Wayne, NJ
800-346-6672
www.toshiba.com/tacp

Make a List; Check it Twice

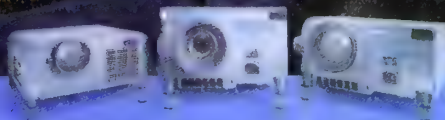
Professional pilots use checklists to make sure everything is in working order before they take off, and pilots should be no different. Make a checklist of all the equipment required to set up and test the equipment, and to make sure you have everything you need before you start. Then, enough time before the presentation to go over the checklist carefully, item by item, and deal with any problems that might crop up at that moment.

**PITCHING NEW CLIENT
IN CONFERENCE ROOM AT 8 AM.**

**PRESENTING IN EIGHT CITIES
OVER FIVE DAYS.**

**PREPARING COMPLEX CAD
PRESENTATION.**

**ENJOYING LIFE-SIZE PROJECTION
OF HOME OPENER.**



MultiSync

Presentation solutions for every presentation need. No matter what field you're interested in, there's a MultiSync

projector that's right for you. Amazees you marvel at the vivid imagery that comes with our ActiveBlend™ technology. You'll love the ease

of use, the reliability, and the excellence of our InstaCare™ 24-hour replacement guarantee. The complete list of MultiSync products. There's one

	Brightness	Resolutions	Inputs/Outputs
Model 17 Series	100-1500 lumens	1024x768, 1280x800, 1600x1200	2x VGA, 1x DVI, 1x S-Video, 1x Composite, 1x Audio
Model 17 Series	100-1500 lumens	1024x768, 1280x800, 1600x1200	2x VGA, 1x DVI, 1x S-Video, 1x Composite, 1x Audio
Model 22 Series	100-1500 lumens	1024x768, 1280x800, 1600x1200	2x VGA, 1x DVI, 1x S-Video, 1x Composite, 1x Audio

for your exact needs, whether you're projecting first

quarter earnings or the fourth quarter score.

NEC Technologies. Expect more. Experience more.

NEC

NEC Technologies

To learn more, and enter to win a 20" MultiSync LCD monitor, call toll-free (877) 487-8555. Or visit us at www.nec.com/nectech/nrl/
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Notevision5

unlevel the playing field™

**We Made Our
XGA COMPACT
So PRESENTER
FRIENDLY
You'll Almost
Think
WE READ
YOUR MIND.**

Astound your audience! Amaze your peers! The magnificent Notevision5 LCD projector is not only mind-boggling with its XGA resolution and compact size, but it's ultra presenter friendly.

Set-up's a no brainer with its color coded cables. Just connect and project. Or go absolutely wireless with Sharp's exclusive IrCOM infrared interface. Plus Sharp's autoSYNC "Thanks" and ImageACE features automatically give you a perfect picture every time. **Notevision!**

And to ease your mind, Notevision5 even has a 3 year limited warranty. We know what you're thinking—you're gonna love it.

XG-NV5XU Notevision5
The Presenter Friendly
Projector.



Actius™ A100
UltraLite Note

SHARP

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U.S.A. T PAPER IN UR PRESENTATIONS

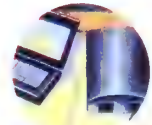
it — the “paperless” is far from becoming a reality. Digital presentations are great, but what do you do when you have a lot of paper to show your audience? If you have the right equipment and the facilities, you

small as a postage stamp, or you can even place small, three-dimensional objects under the camera — something you can't do with a traditional overhead projector.

You can send the output from the DZ-3600U to standard video monitors or digital projectors using either composite video or S-Video connections. A USB (Universal Serial Bus) port also lets you

Rent an Audience

Giving a talk to a mirror is not nearly as effective as to another person. Grab a colleague, spouse, or friend and have them listen to a run-through. Even without their feedback, you'll find out where the rough spots are that could use some smoothing.



“Face it — the “paperless office” is far from becoming a reality...”

other applications.

“The DZ-3600U represents Canon's commitment to deliver truly revolutionary image resolution and manipulation flexibility to the entire presentation systems marketplace cost-effectively,” said Mr. Hiroshi Shimoda, director and general manager of Canon U.S.A.'s Visual Communication Systems Division.

The DZ-3600U digital display camera is ideal for a range of applications — from teleconferences to presentations to training — and its compact size and ease of use will make it an instant hit with novice and experienced users. It looks like paper will be with us for a while longer, and the Canon DZ-3600U will help you display pages easily, quickly, and in razor-sharp detail.

.....
Canon U.S.A.
Lake Success, NY
1-800-OK-CANON
www.usa.canon.com

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Editorial Offices: 701 Westchester Avenue, White Plains, NY 10604



DZ-3600U digital document camera uses patented Paralled technology to make high-resolution imaging affordable.

can it, or you could place it onto an overhead projector and set up a presentation. Or you could use the new DZ-3600U digital display camera from

high-resolution camera resolution based on Canon's "parallel Plate" imaging technology, which is sufficient to display a full page of text, and have every word on the page be legible. Every display stage can be used to display items as

send images to a personal computer or laptop. The device also accepts auxiliary composite and S-Video inputs. And an infra-red remote control lets you adjust the camera's settings from across the room. It is also possible to control the device remotely using a serial port connection.

The DZ-3600U can capture an image in four seconds or less. The camera also comes with software that makes it easy to integrate images seamlessly into PowerPoint presentations and

CHIPS THAT MIMIC THE HUMAN SENSES

Companies are scrapping over this exploding market

You may not have realized it, but you've probably used digital-signal processing chips a dozen times today. Listening to a compact-disk over breakfast was one instance. So was using a modem to check your E-mail. Driving your car involved several electronic systems powered by these specialized chips. They are also found in cell phones, personal-computer sound systems, digital cameras—and the list goes on.

But that's nothing, compared with what's coming. Industry experts predict that by 2005, the convergence of computers, telecommunications, and consumer electronics will push demand for digital-signal processing (DSP) to 10 times what it is today. These chips will then be at the heart of almost every electronic gadget you touch, from new stereo systems and smart home appliances to office machines and factory equipment. DSP chips that can understand speech will replace touchpads and push-buttons on all kinds of products—including VCRs that you can program by telling them what to record.

BLINDING SPEED. What makes these chips so special? Well, DSP could stand for digital sensory perception, because these slices of silicon are the nerve cells that connect electronic devices to the real world. They're honed to deal with things like sounds, images, pressure, temperature, electrical currents, and radio waves. They chop these analog signals into digital bits, then perform specialized operations, such as compressing the bits gushing through telephone lines. And they do this at blinding speed. One of Intel Corp.'s Pentium chips couldn't keep pace with such signals for very long. A steady analog del-

uge would quickly swamp any ordinary microprocessor.

Digital cell phones are currently DSP's hot growth market. Some 86 million of these were sold worldwide last year, and the 1998 market is pegged at 140 million phones. That's 50 million more than this year's estimated

GROWING MARKETS FOR DIGITAL SIGNAL PROCESSING CHIPS

◀ TELECOMMUNICATIONS

HARD-DRIVE CONTROLLERS

DIGITAL CAMERAS ▶

SMART MOTOR CONTROLS

GPS "APPLIANCES"

◀ DIGITAL RADIO AND TV

DIGITAL HEARING AIDS ▶

DIGITAL CABLE MODEMS

STEREO SYSTEMS

SPEECH RECOGNITION SYSTEMS

sales of PCs. DSP chips even outnumber Intel microprocessors in PCs. Most computers have at least two DSP chips. One handles the data streaming to and from the hard-disk drive, and others control the modem, sound card, and graphics accelerator.

Small wonder that DSP chips are bucking the downturn in semiconductors. Total chip sales are projected to dip around 11% this year, to below \$125 billion. But the DSP forecast calls for 20% growth, to \$3.9 billion, followed by a 30% jump next year (chart), according to market researcher Forward Concepts Co. in Tempe, Ariz.

That outlook is fueling raging competition. Four U.S. chipmakers—Texas Instruments, Lucent Technologies, Motorola, and Analog Devices—command

97% of the world's DSP business; newcomers IBM and a score of others are rushing to stake claims, too. Half a month passes, it seems, without announcement of a faster and more sophisticated chip.

In late September, for example, Motorola Inc. unwrapped new audio chips with better fidelity and bargain prices. Players now have chips that handle sounds in 16-bit snippets. By harnessing smaller transistors, Motorola cranked the performance of its 24-bit chips, mainly found in studio gear—onto a smaller piece of silicon. The result: a lifetime sound for as little as \$5. With bit chips, CD players will sound just "warm" and rich as a virgin vinyl recording, says Valerie K. Hase, head of audio operations at Motorola.

The new chips will also turn car concert halls. Motorola's technology provides processing speeds of up to 100 million instructions per second. Since more enor- play- sing- co- ns- use th- over horsepo- tune their stereo system the acoustics of each make and w- The chips can compensate for e- tions off glass at specific distance- angles from the speakers. "Ca- ideal for high-quality audio," says, because interior dime- and "furniture" are u- unlike living rooms- Yet Motorola's chips are poke-

pared with some competitors. Texas Instruments Inc., the king of with a 45% market share and 19% of \$1.44 billion, unveiled a chip that can process 1,600 MIPS. This speed will be needed for digital-gence products, such as cell phone download Internet graphics and clips, or modems that handle bit and speech simultaneously. Today media systems typically have rate DSP chip for each type of s- TI's rivals are determined



Analogue Devices matched TI's 1,600-record last June—when grabbed the 1 October. Its up- TigerShare chip new through some MIPS. "It's really a computer on chip," Gerald McGuire, TI's manager of DSP products. While, Lucent Technologies Inc.—parent of laboratories, which led DSP in 1979—d up with rival 10 last summer to p new DSP tech-

Also in October, TI offered a peek at its StarCore chip, which is almost as fast as TigerShare: up to 100 MIPS.

These superfast chips are paving the way for new applications. Parts of machines can join the human brain, talking and

and to people, predicts John T. N, president of Lucent's Microelectronics Group. Copy machines, microwave ovens, and TVs could lose push-buttons and sprout microchips. Over at TI, researchers see big gains in controls that boost the performance of machine tools and factory robots. DSP chips that integrate data from sensors could replace artificial arms and legs. With a sense of touch, suggests Thomas Engibous, TI's chairman and chief executive. Finally, DSP might help create prosthetic limbs for the blind.

MOTOR. Cheaper DSPs, meanwhile, will find their way into mundane products. For example, U.S. homes have dozens of appliances, most of which run full blast when they are on. DSP controllers could put an energy diet, metering out just enough power to do the job. Electrolux, the Swedish company that makes the world's electric motors, is shipping DSP-smart motors for commercial refrigerators, which consume 50% less juice than previously. Analog Devices supplies the DSP chips



BETTING THE FARM: TI chief Engibous spun off all non-DSP businesses

the processor gets to do the integration." So Engibous has sold off all of TI's other businesses, including military systems, engineering software, and laptop computers. The last to go was dynamic random-access memory chips. DRAMs accounted for a quarter of TI's \$13 billion revenue during the semiconductor boom in 1995. But their yo-yo profits have lately strung out to nothing. In June, the DRAM unit went to Micron Technology Inc. for \$830 million in stock and notes.

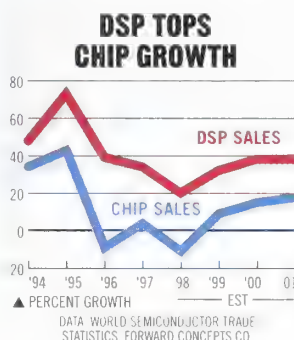
Even with all his eggs in the DSP basket, Engibous isn't fazed by the mounting competition. "There's no question that this is a competitive business—but no more than it has been for quite some time," he says. As for the Lucent-Motorola

joint effort, they're "just licking their wounds." Last year, Lucent's and Motorola's DSP sales climbed 30% and 20%, respectively, while TI's jumped 37%, says William I. Strauss, president of market watcher Forward Concepts.

SWAT TEAM. The competition isn't about to roll over, though. Hector de J. Ruiz, president of Motorola's semiconductor unit, asserts that one key to winning tomorrow's markets is developing technology standards. "Customers strongly want standards," he says, to avoid being locked into a relationship with one supplier. Now, clients can't swap a Motorola chip, say, for one from TI. The reason: The chips are stuffed with proprietary software that's tuned to each chip's architecture. Working with Lucent, Ruiz aims to change all that—allowing both companies to woo TI's customers.

Good luck, retorts Engibous. Today, 70% of all DSP engineers work in TI's software language, and 900 universities teach it to programmers. That's why Strauss of Forward Concepts doesn't think anyone stands much chance of stealing TI's thunder. Investors seem to share his confidence. Since TI bowed out of DRAMs last June, its stock has climbed almost 30%, from \$50. That's a signal that any chip could read.

By Otis Port in New York, with Paul C. Judge in Boston



EDITED BY AMY DUNKIN

THE BEST BETS FOR SMALL-CAP DIEHARDS

Like the chagrined lover in Sheryl Crow's hit tune, "My Favorite Mistake," legions of contrarians cling to small-company stocks despite their heart-breaking ways. Take Jeff Burger, a Sussex (Wis.) engineer, whose stake in T. Rowe Price Small Cap Value Fund has disappointed him since 1996. Yet he holds on, believing small caps are plain cheap: "It doesn't make any sense that people would want to pay more for a dollar of large-company earnings than for a dollar of small-company earnings."

Now, at last, love may be requited. After plunging in the third quarter by 20%, more than twice as far as large caps, small-company stocks are taking wing. Since Oct. 8, the Russell 2000 index of small caps has surged 25%. Yet because of all the damage done earlier, the price-earnings ratio on small caps sank in October below that of large caps for the first time since 1990—and only the third time since 1979 (chart)—says Wilshire Associates, the Santa Monica (Calif.) investment research firm. The last two times that happened marked the start of long bull runs in small stocks.

If you suspect history is poised to repeat itself, you can pick stocks yourself or look for a mutual fund. For many, funds are the best bet, since diversifying risks is more important in volatile small stocks than in large. As if on cue, fund companies are launching small-cap funds and reopening established ones to new investors.

Which strategy is right for

you depends on how you like your risk. The average new fund is riskier simply because it has no track record, says Matthew Muehlbauer, Value Line's mutual fund research chief. That makes sense to Paul Harvey, a reference librarian in Dedham, Mass., and owner of five small-cap funds. "I'm inclined to want funds to be open three years before I invest," he says.

Seasoned funds present other worries. First, many with attractive track records may get too large too fast. "They'll have a lot of money flooding in," says John Rekenthaler, Morningstar's research director, "and size becomes self-defeating in the small-cap arena." Swollen funds have trouble putting enough of their assets to work in their best picks without kiting those stocks' prices or bumping up against rules on how much of any one company they can own. The result is underperformance. The second trouble is many established funds come with unrealized capital gains—a tax liability new investors would shoulder without having enjoyed the underlying profit.

HAPPY NEWS. None of this matters if you're investing in a tax-deferred retirement account. But if you aren't, there's some happy news: This year's market rout has left many funds with paper losses. At October's end, the average domestic small-cap fund in Morningstar's Principia data base had an unrealized loss of 6%. That's an opportunity to buy into sev-

YOUR MONEY

MUTUAL FUNDS



What's New in Small Cap

FUND/PHONE NO.	MANAGER	EXPENSE RATIO
FORWARD FUNDS SMALL CAP. STOCK 800 999-6809	Irene Hoover	1.45%*
N/I NUMERIC INVESTORS SMALL CAP VALUE 800 686-3742	Team	1.00%
VANGUARD SMALL-CAP GROWTH INDEX 800 662-7447	George Sauter	0.25%*
VANGUARD SMALL-CAP VALUE INDEX 800 662-7447	George Sauter	0.25%*

*Plus transaction fees paid into fund

seasoned funds without
an overhang. But take
Some funds, including
indby Pennsylvania Mu-
still have serious tax
res.

What should you do? We
went looking for a few of the
best possibilities. Among new
funds, we sought those run
by managers who have solid
records with similar portfo-
lios. For older funds, we used
the Morningstar data base to
isolate the few that have
good, long records, yet
aren't too large. We
also kept an eye
open for port-

folios free of unrealized capi-
tal gains. Finally, we nixed
funds with loads, high ex-
pense ratios, and minimum
investments of more than
\$10,000. In the end, we came
up with four new and four
old funds (table).

The new funds are run in
distinctly different styles.
Opened in October, Forward
Funds Small Capitalization
Stock Fund is managed by
an old-fashioned stock pick-
er, San Francisco-based Irene
Hoover. Before she quit a
year ago to form her own
firm, Hoover's Jurika &
Voyles Mini-Cap Fund posted
a 43% annual average total
return—at the time, the best
three-year record among di-
versified U.S. stock funds.

Hoover believes small-cap
stock prices often move
randomly, so she's quick
to sell stocks that get
ahead of reasonable
earnings prospects. She
figures she can always
buy the stock back
cheaper later, something

constantly for the 120 or so
best bets in a universe of
1,500. The n/i numeric in-
vestors Micro Cap, a similar,
but closed, fund devoted to
growth stocks, has handily
beaten rivals: \$10,000 invested
in the fund at its June, 1996,
launch grew to \$14,439
through October, while the av-
erage comparable fund would
have turned \$10,000 into
\$9,284, Morningstar says.

One warning: Numeric ex-
pects the new fund to trade
its stocks on average every
four months or less. If the
strategy is successful and
generates plenty of short-
term capital gains, sharehold-
ers can expect to be hit with
a hefty tax bill.

SEASONED FUNDS. More fa-
miliar is the approach used
by Vanguard to manage its
new funds, one focused on
value stocks and the second
on growth companies. Both
are index funds, designed to
mimic a set list of stocks and
capture the market's average
return, while keeping costs

Some market watchers
believe that we may be at
the start of a long bull
run in small stocks

And Some Old Favorites

	AVG. ANNUAL TOTAL RETURN*	UNREALIZED GAIN/LOSS**	ASSETS (MILLIONS)
UNITY	13.2%	-9%	\$184
SPECIAL EQUITY	15.7%	1%	\$758
DWTH	15.6%	1%	\$1,554
ROWTH	15.4%	-1%	\$162

Oct. 31; versus 11.72% for Russell 2000 Index
olio

DATA: MORNINGSTAR INC., BUSINESS WEEK

she has done often with the
likes of regional broker Legg
Mason and oil-service compa-
ny Key Energy Group.

Recently, top holdings have
included contractor Granite
Construction and Westameri-
ca Bancorp., both "niche-dom-
inant companies" that enjoy
some pricing power, strong
cash flows, and little debt.
"I'm trying to find what I call
baby blue chips," she says.

By contrast, the funds run
by Numeric Investors in
Cambridge, Mass., operate
strictly by the numbers. Set
to begin taking new money
on Dec. 1, n/i numeric in-
vestors Small Cap Value Fund
(next page) will rely on a
computer model that searches

at a minimum. They are
overseen by 11-year indexing
veteran George Sauter.

If you're not comfortable
with a new fund, four sea-
soned ones with differing in-
vesting styles popped up on
our screen. Like Numeric In-
vestors, the managers at
Eclipse Equity rely on com-
puter models to search
through some 4,000 stocks be-
fore settling on a list of more
than 300. Unlike Numeric's
model, Eclipse's places heav-
ier emphasis on balance-sheet
strength and doesn't hew
rigidly to the industry
weightings of some index.
Recently, it has had heavier-
than-average exposure to uti-
lities, cyclical, and such re-

tail-sector stocks as Ryan's Family Steak Houses.

Managers Special Equity hands off its money to four stock pickers. Some favor value stocks, and others growth companies and micro caps. It recently had a portfolio of 305 holdings, with transportation gear lessor XTRA and radio station operator Emmis Communications atop the list.

With assets of \$1.6 billion, Safeco Growth is on the big side for a small-cap fund. But manager Thomas Maguire has kept it from becoming unwieldy by building quirky portfolios. Not long ago, he owned mega cap Philip Morris along with little Family Golf Centers. Somehow, it works: In the nine years he has steered the fund, a

\$10,000 investment has grown to \$35,511, while that much in the average rival would have grown to \$29,744.

Wasatch Growth hasn't fared as well, in part because it has a 1.5% expense ratio—the highest of this group. Manager Samuel Stewart's fund also is stuffed with such tiny, no-name stocks as retailers Marks Bros. Jewelers

and O'Reilly Automotive chain of parts stores in the Midwest. At \$320 million, it has the lowest median market capitalization among the four funds. That may benefit more than others if bulls keep chomping into the small-cap market, a prospect sure to soothe any small-cap investor's worst fears. *Robert E.*

'THE MEGA-LARGE CAPS HAVE HAD THEIR DAY

Hoping to build on the success of its family of four mutual funds,

Cambridge (Mass.)-based Numeric Investors will soon bring out n/i numeric investors Small Cap Value Fund. The team of quants at Numeric, which manages a total of \$4.2 billion in assets, relies on a flood of financial data flowing through its computers to tell it which stocks to buy or sell. BUSINESS WEEK Senior Writer Robert Barker spoke with Numeric Managing Director John Bogle Jr. and Arup Datta, the new fund's lead manager:

Why a small-cap value fund now?

Bogle: It's the only area left in the U.S. market where we're not already exploiting some market inefficiency.

Is it serendipitous that small-cap valuations, relative to big-cap multiples, seem recently to have hit a nadir?

Bogle: There are some statistics that would lead you to believe that. But we don't make calls as to whether small is going to do better than large.

So you're agnostic?



Bogle: We're completely agnostic on that point, although our gut [feeling] is that it's probably not a bad time to be investing in the small-cap part of the marketplace.

Datta: We especially believe that the mega-large-caps might have had their day.

How much money will you run this way?

Bogle: \$200 million or \$250 million.

How many stocks will the fund hold?

Datta: On average, about 120. We do not do any market or sector timing. We will be mimicking the sector weights of the

TIMELY VENTURE
Numeric's Datta and Bogle are launching a new value fund that will invest in about 120 small companies

benchmark we'll run against. For example, the benchmark [the Russell 2000 Value Index] has 25% in financials; we'll also invest around 25% in financials.

What else?

Datta: I'd like to differentiate our model from a "deep-value" model. We do look at earnings and book [value]... but we believe

that for most companies that are going concerns the book value [or underlying asset values] does not matter. It's the earnings that drive the stock price... Our value model is willing to pay up for growth and quality.

When you say quality, you mean the quality of earnings?

Bogle: It means we're looking at the stability of past earnings and the certainty of analysts' forecasts of future earnings.

So, all else being equal, your model prefers a service company to, say, a cyclical?

Datta: Yes.

Why should anyone put money in this new fund?

Bogle: The main reason is our commitment to ensuring the shareholder gets a fair deal by our explicitly saying up front that we will not take on too many assets. We can't overstate the importance of that. Another reason is that we've got a proven value methodology that has been working in our large-cap [fund].

What's your performance goal?

Datta: To beat the benchmark by 2 or 2½ percentage points per year, on average, after fees.

**SUCCESS IS A DIRECT RESULT OF AMBITION,
CONNECTIONS, OR A REALLY GOOD TO-DO LIST.**



Address book



Date book

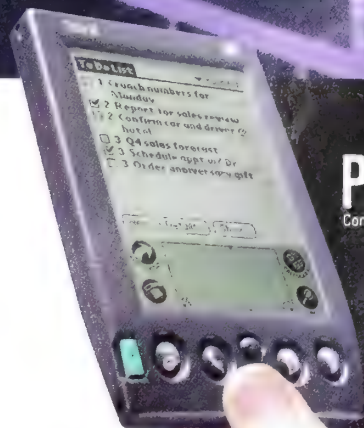


Memo pad



To-do list

emize, categorize, and prioritize everything you need to do. Conquer a goal with each
x you check. And that's just the to-do list. With the Palm III™ connected organizer, you
in store thousands of contacts and years of schedules. Even exchange that information
ack and forth with your PC and our HotSync® technology. So when everything
u need is right at your fingertips, who needs a corner office? Palm Computing®
nnected organizers start as low as \$249*. To learn more, visit www.palm.com.



Palm III
Connected Organizer



More connected.™

THESE STOCK-CAR STOCKS ARE ZIPPING ALONG

Investors, start your engines. While most sports stocks have been laggards lately, one group—auto racing issues—has been going strong. "The economics of the motor-sports industry are very, very attractive," says Scott Barry, an analyst who follows NASCAR track operators for Raymond James & Associates in St. Petersburg, Fla. "You've got surging demand."

No longer the exclusive province of blue-collar males in the Southeast, stock-car racing has broadened its appeal. The National Association for Stock Car Auto Racing, or NASCAR, has moved into major markets including Fort Worth, Los Angeles, and Las Vegas, and women now make up close to 40% of the fans. Indeed, attendance at NASCAR events has risen steadily during the decade, with the Winston Cup Series drawing more than 6 million spectators around the U.S. in 1997, up from 3.7 million in 1992. This year's attendance is expected to be up again.

PROMISING PAIR. If you want to invest in a NASCAR track operator, two key players are International Speedway and Speedway Motor Sports (table). International Speedway is the pricier of the two: Among its holdings is Florida's Daytona International Speedway, home of the sport's marquee event held every February. International Speedway trades around 30 times projected 1999 earnings of \$1.10 a share, compared with a multiple of 21 for Speedway Motor Sports, according to Zacks Investment Research. But James Stoeffel, an analyst at Salomon Smith Barney, believes International Speedway is worth its premi-

um. Besides Daytona International, its other well-known properties include Talladega Superspeedway in Alabama, he says.

Speedway Motor Sports' prospects are also bright. Based on analysts' estimates compiled by Zacks, earnings are expected to grow 22% annually over the next five years. It runs the Texas Motor Speedway in Fort Worth, a new facility whose grandstand holds 157,500 spectators and 194 luxury suites.

NASCAR operators are counting on continuing growth in ad revenues from cable and broadcast networks, even though TV ratings have sagged for many other sports. With ESPN, TNN, TBS, CBS, and ABC broadcasting races, TV rights can come to \$2 million for an individual race—and sometimes a lot more than that. Other major revenue sources are also growing. Corporate sponsorships rose 9%, to \$441 mil-

lion, in 1997, says Barry. Raymond James, with K. Procter & Gamble, and Donald's among the names backing events. Thanks to new facilities and the expansion of existing venues, many tracks now seat more than 100,000 spectators and offer plenty of lucrative luxury boxes that rent for \$600 to \$150,000 a year. "That's just the type of thing sponsors want to be all over," says Sal Stoeffel.

If you'd rather not own one NASCAR stock, you can invest in the industry via the Stock Car Stocks Index (877 223-3863). The tiny index doesn't have a track record yet—it was launched on Oct. 1 with \$600,000—but was up 14.4% through Nov. 17. It was founded by John B. Bly, a former index fund manager at NationsBank who got into racing via his fiancée, who handles marketing for the Citgo NASCAR team. **SELLING SOUVENIRS.** The 52-stock index, the fund invests in track operators including Speedway Motor Sports as well as NASCAR sponsors as Coca-Cola and Eastman Kodak. The fund also has a stake in Action Performance, which sells model-size replicas of NASCAR and other race tracks and through tailors and collectors' items. Action Performance has expanded into NASCAR-related t-shirts, caps, and souvenirs and trades at 14 times estimated 1999 earnings per share.

The major concern is whether it can sustain strong growth in track attendance, TV ratings, and rate sponsorships. If the sports have hit that point—NASCAR could be in for a rough ride. But right now, investors are still flocking to stock issues with all the energy of race fans on a Saturday. *Lawrence*

YOUR MONEY STOCKS



TRACKING UP: New facilities have boosted attendance

Racing Leaders

COMPANY (SYMBOL)	PRICE*	52-WK. HIGH	P-E RATIO**	ESTIMATED 1999 EARNINGS GROWTH
ACTION PERFORMANCE (ACTN)	28	39 1/4	14	34.0%
INTERNATIONAL SPEEDWAY (ISCA)	33 1/2	37 1/4	30	14.5
PENSKE MOTORSPORTS (SPWY)	25	34 1/4	17	23.8
RACING CHAMPIONS (RACN)	12 1/4	13 1/4	12	20.0
SPEEDWAY MOTOR SPORTS (TRK)	25 1/8	29 1/4	21	18.4

*Nov. 16

**Based on 1999 estimated earnings

DATA: ZACKS INVESTOR RESEARCH, BLOOMBERG FINANCIAL MARKETS

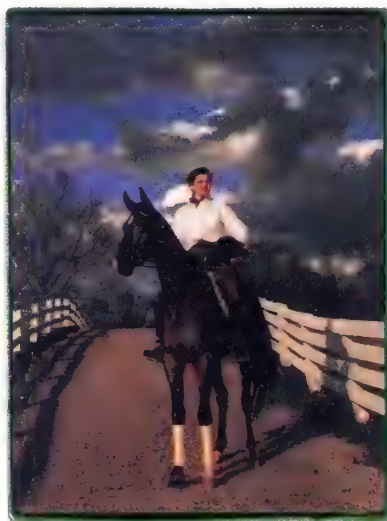
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Corporate Services
for winning the Business Week Award
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Toyota Motor Corporate Services

TAKESHI NAGAYA, PRESIDENT



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that sell for

**MILLIONS
OF DOLLARS**

Luckily they also

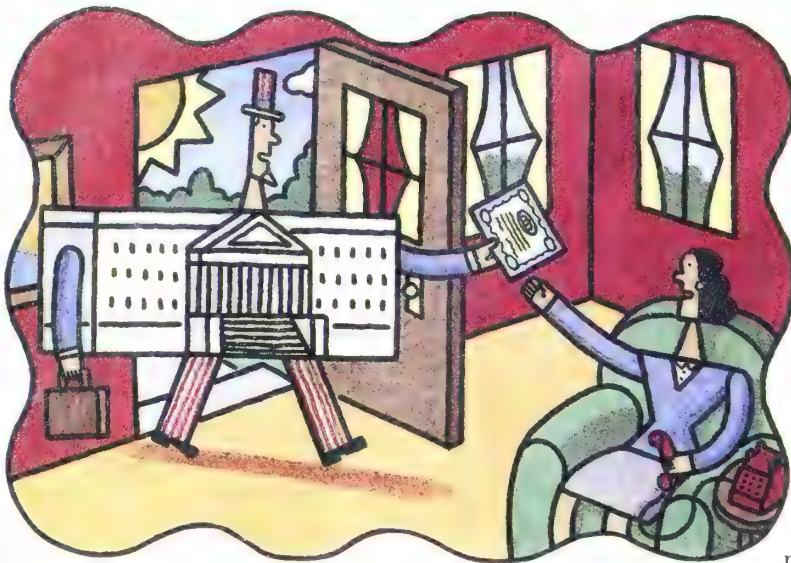
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FORMS OF TRANSPORT



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TREASURY-BOND SHOPPING MADE EASY

As the safest investment in the world, U.S. government securities have always been popular with individual investors. Even though their yields have fallen to a mere 5.25% for 30-year bonds and around 4.5% for maturities of three months to five years, recent stock market volatility has only whetted the appetite for Treasury debt.

With demand for Treas-

uries rising, it's good news that the government has made several improvements to its Treasury Direct program. Treasury Direct allows you to buy T-bills, notes, and bonds directly from the government without paying extra fees of \$50 or \$60 per transaction to a bond dealer or broker. The agency also cut the required minimum purchase to \$1,000 for T-bills—debt with maturities of one year or less—and two-year notes from \$10,000

YOUR MONEY BONDS

and \$5,000, respectively.

But the biggest change to the 12-year-old Treasury Direct program, which maintains 800,000 accounts holding \$85 billion in assets, has come about thanks to increased automation. Buy Direct, an electronic service launched this fall, allows current account holders to purchase securities by a toll-free phone number (800 943-6864) or via the Bureau of the Public Debt Web site (table). The government deducts the price of the securities from the checking or savings account you designate at your bank. Prior to the phone and Web services, you had to mail in order forms for specific securities, along with a check for the purchase price.

You can also check account balances, reinvest maturing securities, and request tax information, such as a duplicate 1099, online and by phone. True, you still need to mail in a form to your local Federal Reserve Bank to open a Treasury Direct account. But you can download an application and find out the bank's mailing address on the Web.

FEE ADVANTAGE. Buy Direct is the counterpart to Sell Direct, which the Treasury set up last year to make it easier to sell securities. Before Sell Direct, customers needed to transfer bonds to a dealer or bank so they could be sold in the secondary market. Now, the Federal Reserve Bank of Chicago will handle sales for \$34 per security. (The only other fee in Treasury Direct is a \$25-a-year charge for accounts larger than \$100,000.) You need to send in a signed form which you can download off the Internet. Even though the government will sell your bonds for you, active traders

will probably get faster service from a broker. Treasury Direct is really intended for investors who plan to hold to maturity, says Peter Hollenbach, spokesman for the Bureau of the Public Debt.

Buying Treasuries through a U.S. government securities mutual fund can be more convenient than buying them up from the government. A fund provides professional management, diversification, and monthly income, without you having to go through the trouble of ordering the portfolio yourself to get income payments every month or quarter. The downside of funds is that they expose you to more risk, unlike Treasuries, which have a stated maturity on which you'll get their principal back. Still, for investors who like to own Treasury securities outright, the government has picked an opportune time to simplify the buying process. *Amey*

WORTH NOTING

■ **LOAN RELIEF:** For the next several weeks, you may have a chance to bring down the interest rate on your student loans. Borrowers who went through the Education Dept.'s Direct Loan Program or received a federally guaranteed loan from private banks by Jan. 31 to consolidate their loans and get into a rate of 2.3 percentage points above the day Treasury bill, down from 3.1 points. That brings the current loan rate to 7.46%. To see whether refinancing makes sense for you, check out the calculator at the Education Dept. Web site, www.ed.gov/directloan/consolid2. You can apply for a refinancing by calling 800-557-7392 or going to www.ed.gov/directloan to download an application.

The Direct Route To Treasuries

OPEN AN ACCOUNT Call your local Federal Reserve branch or visit www.publicdebt.treas.gov.

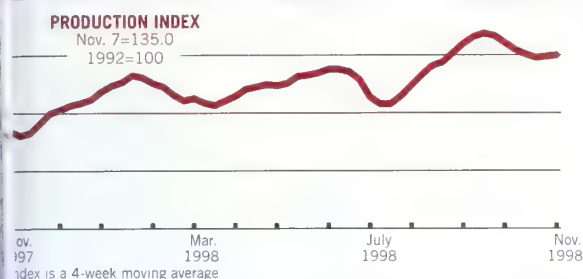
DEVISE A STRATEGY Let's say you have 60% in stocks and 40% in bonds. Consider putting a quarter of the fixed-income part into Treasuries. Put a little more into two-year notes than 30-year bonds.

PAY FOR THE BONDS After you place your order, your tender will be processed in the next auction. The government will deduct the price of the securities from a designated bank account.

DATA: BUSINESS WEEK; U.S. DEPARTMENT OF THE PUBLIC DEBT, LOOMIS, SAYLES & CO.; AMERICAN CENTURY

PRODUCTION INDEX

Change from last week: 0.1%
Change from last year: 5.3%



The production index continued to climb in the week ended Nov. 7. However, the averaged index dipped 0.4%, to 135, from 135.6 the week before. Seasonal adjustment, output of both autos and trucks posted gains. The refinery runs also increased. On the downside, steel production fell, as did electric power output. Production of coal and lumber also fell, as rail-freight traffic dropped as well.

Source: Index compiled 1998 by The McGraw-Hill Companies

PRICING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (11/13) S&P 500	1125.72	1141.01	21.3
RATE BOND YIELD, Aaa (11/13)	6.42%	6.61%	-6.6
SUPPLY, M2 (11/2) billions	\$4,364.0	\$4,361.1r	8.6
CLAIMS, UNEMPLOYMENT (11/6) thous.	321	309r	1.9
HOUSING APPLICATIONS, PURCHASE (11/13)	295.8	291.9	30.3
HOUSING APPLICATIONS, REFINANCE (11/13)	1,723.0	1,987.0	104.5

Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage News Index (March 16, 1990=100)

BEST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
FUNDS (11/17)	4.61%	4.95%	5.45%
GOVERNMENT PAPER (11/17) 3-month	5.26	5.15	5.66
RATES OF DEPOSIT (11/18) 3-month	5.16	5.30	5.77
MORTGAGE (11/13) 30-year	7.08	7.03	7.37
FIXED RATE MORTGAGE (11/13) one-year	5.74	5.65	5.68
1/13)	7.75-8.00	8.00	8.50

Federal Reserve, HSH Associates, Bloomberg Financial Markets

in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

BUDGET

Nov. 23, 2 p.m. EST ▶ The Treasury is expected to report a deficit of \$10 billion for October, according to the precast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. October is the first month of the 1999 fiscal year. Fiscal 1998 ended with a surplus of \$70 billion.

DOMESTIC PRODUCT

Nov. 24, 8:30 a.m. EST ▶ Third-quarter growth in real gross domestic product is likely to be 3.3%, according to preliminary reports. Higher inventory growth and a lower trade deficit will push the

growth rate higher. Also, the Commerce Dept. will report third-quarter corporate profits. Aftertax earnings are expected to fall 0.7% from the second quarter.

DURABLE GOODS ORDERS

Tuesday, Nov. 24, 10 a.m. EST ▶ Orders received by manufacturers of durable goods are projected to have fallen by 0.5% in October, according to the S&P MMS survey. September's figure had risen 0.9%.

CONSUMER CONFIDENCE

Tuesday, Nov. 24, 10 a.m. EST ▶ The Conference Board's index of consumer confidence for November is expected to have rebounded, to 119.5, based on the S&P MMS

survey, after falling nine points in October to 117.3. Confidence is expected to have been lifted by a firmer stock market, less political uncertainty, and the Federal Reserve cuts in interest rates.

PERSONAL INCOME

Wednesday, Nov. 25, 8:30 a.m. EST ▶ Personal income in October is expected to have risen by 0.4%, based on the S&P MMS survey, after having posted a 0.2% increase in September. Personal income is expected to slow as employment growth slows. However, consumer spending in October is projected to have increased by 0.6%, buoyed by the month's jump in car sales. September spending was up by 0.5%.

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (11/14) thous. of net tons	1,864	1,841#	-13.9
AUTOS (11/14) units	99,055	129,320r#	-24.4
TRUCKS (11/14) units	119,988	148,272r#	-16.3
ELECTRIC POWER (11/14) millions of kilowatt-hrs.	61,761	61,577#	-1.3
CRUDE-OIL REFINING (11/14) thous. of bbl./day	14,738	14,774#	2.2
COAL (11/7) thous. of net tons	22,001#	22,359	6.7
LUMBER (11/7) millions of ft.	481.3#	512.8	5.6
RAIL FREIGHT (11/7) billions of ton-miles	28.0#	28.7	4.9

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWP1, SFP2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (11/18) \$/troy oz.	296.500	293.500	-3.1
STEEL SCRAP (11/17) #1 heavy, \$/ton	85.50	85.50	-40.4
COPPER (11/13) \$/lb.	75.3	76.3	-18.5
ALUMINUM (11/13) \$/lb.	62.5	62.5	-20.9
COTTON (11/13) strict low middling 1-1/16 in., \$/lb.	68.34	66.13	-0.5
OIL (11/17) \$/bbl.	12.07	13.18	-38.8
CRB FOODSTUFFS (11/17) 1967=100	205.66	219.52	-18.2
CRB RAW INDUSTRIALS (11/17) 1967=100	267.08	267.22	-18.4

Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (11/18)	121.35	121.65	127.37
GERMAN MARK (11/18)	1.67	1.68	1.73
BRITISH POUND (11/18)	1.67	1.66	1.69
FRENCH FRANC (11/18)	5.60	5.63	5.80
ITALIAN LIRA (11/18)	1649.5	1659.0	1696.8
CANADIAN DOLLAR (11/18)	1.56	1.55	1.42
MEXICAN PESO (11/18)	9.935	10.020	8.280
TRADE-WEIGHTED DOLLAR INDEX (11/18)	107.8	108.0	107.2

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

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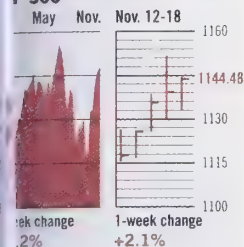
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Investment Figures of the Week

CKS

P 500



MENTARY

stocks were on the march, fueled by the Fed's quarter-point cut in the lending rates on Nov. 1. Although blue chips did join the rally in the S&P and NASDAQ composite on Nov. 17, the Dow Jones industrial average joined other gauges in surging on Nov. 18. On that day, the Dow edged 55 points to 9041.1, the highest level since late in 1997. Computer and Internet stocks, such as Cisco Systems and Yahoo!, were among the biggest gainers.

U.S. MARKETS

	Latest	% change Week	Year
Dow Jones Industrials	9041.1	2.5	17.0
NASDAQ Combined Composite	1897.4	1.9	18.5
S&P MidCap 400	351.5	1.9	10.2
S&P SmallCap 600	162.6	-1.0	-8.9
S&P SuperComposite 1500	241.2	2.0	18.8

SECTORS

	Latest	% change Week	Year
Bloomberg Information Age	401.8	1.1	36.9
S&P Financials	124.3	4.4	10.7
S&P Utilities	256.7	1.0	20.7
PSE Technology	388.6	3.2	28.2

FOREIGN MARKETS

	Latest	% change Week	Year
London (FT-SE 100)	5474.0	-0.1	13.3
Frankfurt (DAX)	4698.7	-0.4	22.5
Tokyo (NIKKEI 225)	14,599.2	1.2	-7.8
Hong Kong (Hang Seng)	10,213.4	0.8	0.6
Toronto (TSE 300)	6342.2	1.0	-5.6
Mexico City (IPC)	4059.2	-1.4	-13.2

FUNDAMENTALS

	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.40%	1.40%	1.63%
S&P 500 P/E Ratio (Last 12 mos.)	29.5	28.8	23.7
S&P 500 P/E Ratio (Next 12 mos.)*	22.2	21.8	18.6
First Call Earnings Revision*	-4.35%	-4.77%	-1.47%

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 200-day average	1083.6	1080.1	Positive
Stocks above 200-day average	32.0%	34.0%	Positive
Options: Put/call ratio	0.54	0.53	Negative
Insiders: Vickers Sell/buy ratio	0.52	0.45	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Semiconductors	29.4	Communications Equip. 69.9
Communications Equip.	23.4	Genl. Merchandise Chains 65.4
Invest. Banking/Bkrge.	21.4	Drug Chains 61.5
Money Center Banks	19.2	Specialty Appar. Retailers 58.2
Instrumentation	18.3	Automobiles 57.9

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Oil & Gas Drilling	-10.8	Oil & Gas Drilling -61.7
Oil Exploration & Prod.	-8.1	Oil-Well Equip. & Svcs. -38.7
Oil-Well Equip. & Svcs.	-5.2	Leisure Time -35.2
International Oil	-4.8	Machine Tools -34.8
Domestic Oil	-4.2	Oil Exploration & Prod. -32.1

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

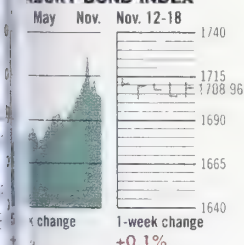
	Price	1-month change
AT&T	61	-5/8
Exxon	70 9/16	-4 7/16
Apple Computer	34 13/16	-2 1/16
Chevron	80 3/4	-5 9/16
Amgen	77 1/4	-1/2
US Airways	48 1/16	-8 7/16

Decline ahead? Stocks with most significant selling on price strength

	Price	1-month change
Dell Computer	64 5/16	7 1/16
Cisco Systems	68 3/4	12 1/2
MCI WorldCom	54 13/16	3 7/8
Biogen	79 1/16	7 13/16
Network Associates	45 15/16	11 1/16
eBay	128 3/8	83 1/4

REST RATES

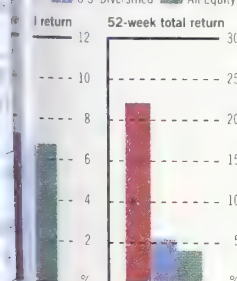
ASURY BOND INDEX



Bloomberg Financial Markets

AL FUNDS

U.S. Diversified All Equity



ningstar, Inc.

KEY RATES

	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	4.83	4.84	5.16
90-DAY TREASURY BILLS	4.42	4.55	5.26
6-MONTH BANK CDS	4.47	4.46	5.19
1-YEAR TREASURY BILLS	4.52	4.53	5.44
10-YEAR TREASURY NOTES	4.85	4.82	5.82
30-YEAR TREASURY BONDS	5.26	5.29	6.03
LONG-TERM AA INDUSTRIALS	6.23	6.34	6.68
LONG-TERM BBB INDUSTRIALS	7.21	7.30	7.00
LONG-TERM AA TELEPHONES	6.52	6.64	6.88

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	Last week	30-yr. bond Latest week	Last week
GENERAL OBLIGATIONS	4.19%	4.17	4.86%	4.87%
PERCENT OF TREASURIES	86.33	86.49	92.41	92.12
TAXABLE EQUIVALENT	6.07	6.04	7.04	7.06
INSURED REVENUE BONDS	4.31	4.28	5.10	5.10
PERCENT OF TREASURIES	88.80	88.77	96.97	96.47
TAXABLE EQUIVALENT	6.25	6.20	7.39	7.39

EQUITY FUNDS

Leaders		Laggards	
Four-week total return	%	Four-week total return	%
Frontier Equity	38.0	ProFunds UltraShort OTC Inv.	-27.8
American Heritage	35.9	Potomac OTC/Short	-14.8
Munder NetNet A	35.1	Prudent Bear	-14.5
ProFunds UltraOTC Investor	35.0	ProFunds UltraBear Serv.	-12.6
WWF Internet	26.4	Comstock Part. Cap. Val. A	-10.3
Leaders		Laggards	
52-week total return	%	52-week total return	%
Transamerica Aggr. Gr. Inv.	53.4	Lexington Troika Russia	-82.8
Flag Investors Commun. A	51.4	Eaton Vance Wwde. Dv. Res. B	-50.6
Dreyfus Technology Growth	47.7	Dreyfus Aggressive Growth	-50.3
Smith Barney Telecomm. Inc.	44.5	Fidelity Sel. Energy Serv.	-47.9
Rydex OTC Investor	44.3	Frontier Equity	-47.5

EQUITY FUND CATEGORIES

Leaders		Laggards	
Four-week total return	%	Four-week total return	%
Technology	18.7	Natural Resources	0.2
Communications	13.5	Real Estate	0.4
Small-cap Growth	11.7	International Hybrid	1.7
Mid-cap Growth	10.6	Precious Metals	2.1
Small-cap Blend	10.3	Europe	3.7
Leaders		Laggards	
52-week total return	%	52-week total return	%
Communications	24.8	Latin America	-26.9
Utilities	20.8	Diversified Emerging Mkts.	-26.6
Large-cap Growth	19.3	Natural Resources	-26.4
Large-cap Blend	15.4	Pacific/Asia ex-Japan	-21.2
Technology	11.8	Diversified Pacific/Asia	-16.7

as of market close Wednesday, Nov. 18, 1998, unless otherwise indicated. Industry de S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Nov. 17. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

WHAT SOCIAL SECURITY CRISIS?

There are two simple truths about the Social Security crisis. A modest, long-term problem is being hyped into an impending catastrophe. And battle lines drawn in Washington over Social Security have less to do with pragmatic solutions than with liberal-conservative wars dating back to the Roosevelt Administration. These are being played out against the backdrop of the next Presidential election. Both Democrats and Republicans are demagoguing. It's time for some clarity.

Conventional wisdom says that Social Security will go bankrupt in 30 years, under the weight of 78 million retired baby boomers. But Social Security actuaries use an average economic growth rate of 1.7% over the next three decades to reach that conclusion. It is a miserly number that projects a below-trend average growth rate into the 21st century.

Assume for a moment that the actuaries are wrong and annual growth is half a percentage point faster (2.2%) over the next 30 years. Assume, too, that the federal tax bite stays the same, taking about 20% of the economy. This math generates an additional \$5 trillion in 1998 dollars in cumulative revenues—a huge sum available for seventysomething boomers. It's entirely plausible. The U.S. has been growing at a 2.5% rate in the '90s, with little inflation. Recently, productivity has been rising at nearly 2% annually. Economic growth in the future will probably average closer to 2.5% than 1.7%. Those who say Social Security trust funds will run out of money overlook the overall revenue picture. Social Security could be paid, in part, out of general revenues. Its funds are already, in effect, commingled with general revenues and are counted in the budget surplus.

The Social Security debate is being framed in Washington as pro- or anti-privatization. It's a false dichotomy. To Social Security, conservatives would begin privatizing by directing a portion of payroll taxes into individual accounts. They argue that people could invest the funds in yielding equities, boosting the savings available for retirement and for investment. This would also permit legislators to turn a chunk of the budget surplus to voters as a tax twofer for those who want to shrink the size of government.

Privatization doesn't work, however, without faster growth. And with faster growth, it isn't needed. Stocks have been going up at double-digit rates because the economy has been booming. But with growth at 1.7%, returns in the stock market wouldn't be much higher than the yields on government bonds. Certainly not enough to throw out the Social Security system as we now know it.

Democrats, for their part, are so desperate to deny the need for a popular tax cut that they want to "save" Social Security by husbanding all budget surpluses while raising payroll taxes. Privatizing is fine with Democratic centrists, but only if the government invests the money. It's a bad plan. Payroll taxes are already onerous—and regressive. The prospect of government owning 20% of General Electric, Ford, or Microsoft is a nightmare. As for tax cuts, a drop in marginal rates can stimulate growth and tax revenues.

The politicization of the Social Security debate obscures the fact that, as Fed Chairman Alan Greenspan puts it, "The bottom line in all retirement programs is the availability of resources." America doesn't need to kill Social Security to save it. It just has to grow fast enough to save the boomers.

IN JAPAN, A NEW GENERATION ARISES

Waiting for Japan to reform has grown into a game over the years. Everyone in the West plays it—policymakers, business leaders, economists, journalists—but no one especially likes it. There are never any winners, anyway—until now, perhaps. Demands for fundamental change are being made deep inside the Iron Triangle that has run the country since the end of U.S. Occupation—the corporate, political, bureaucratic nexus. For the first time, there are forces inside Japan for many of the economic reforms the U.S. has sought for decades. This is an opportunity Washington must not squander.

A mere decade after most Japanese convinced themselves they had become No. 1, recession has led many to question the prevailing model. Favoring producers over consumers, exports over imports, market share over profits, employment over productivity, Japan kept to a developing-nation strategy long after it joined the ranks of advanced countries.

Fault lines are beginning to appear everywhere. Huge losses at Hitachi, Mitsubishi, and other big Japanese corpo-

rations—their first in 50 years—have turned them into members of their own *keiretsu* business groups. Abandoning their system of consensual capitalism, they are selling shares they hold of other *keiretsu* companies to raise cash. Layoffs are tearing up the fabric of corporate life, and lifetime employment was once exchanged for employee loyalty.

A deep split between older and younger politicians is opening as well. Younger Liberal Democrat Party politicians want more power over policymaking and the bureaucracy. They are more sensitive to urban voters and consumer interests. The rival Democratic Party of Japan wants to roll back the disliked sales tax. The Buddhist-backed Komeito Party wants to give consumers free vouchers to stimulate spending.

It would be naive to think that Japan is on the verge of making itself in America's image. Yet it would also be foolish to ignore the changes in Japanese society. Washington must take note. Slamming Japan from the outside is easy. Working with like-minded groups from the inside requires more time.

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A photograph of a dog, possibly a Weimaraner, running through a doorway into a room. The dog is in motion, with its body blurred. The room has a patterned rug, a dark leather sofa, and a lamp on a side table. The doorway is framed by dark wood.

[illegible]

December 7

BusinessWeek

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October 7, 1998

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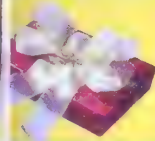


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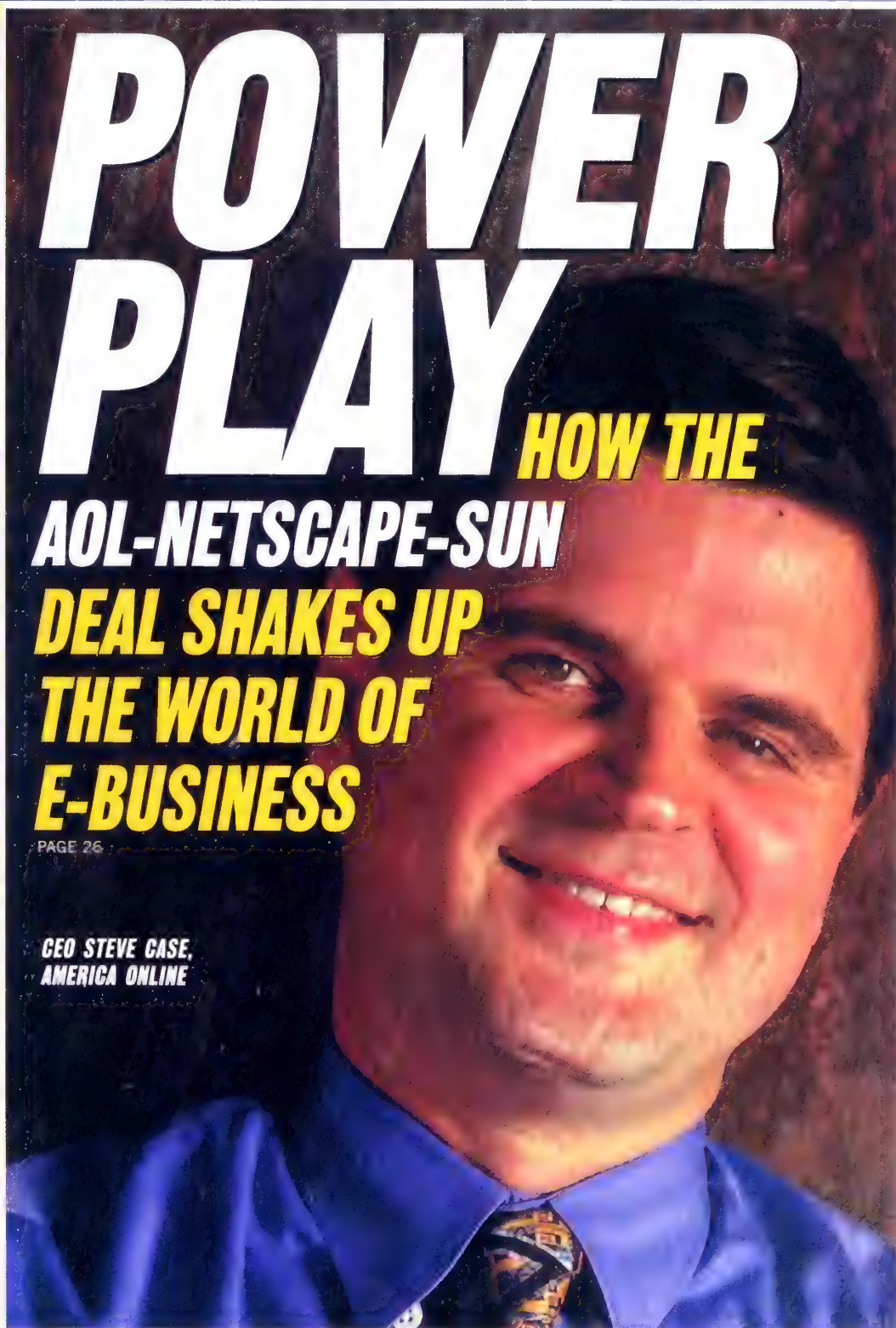
LIBRARY

POWER PLAY

**HOW THE
AOL-NETSCAPE-SUN
DEAL SHAKES UP
THE WORLD OF
E-BUSINESS**

PAGE 26

**CEO STEVE CASE,
AMERICA ONLINE**

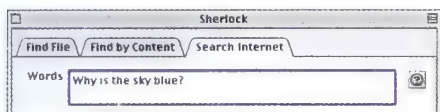


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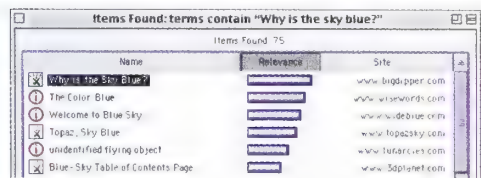
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A NEW CYBER ORDER

The triumph of AOL, Sun, and Netscape could become the crossroads of online business in the 21st century

page 26

BusinessWeek

DECEMBER 7, 1998



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AOL's proposed purchase of Netscape and its marketing deal with Sun Microsystems align some of the most powerful players in cyberspace. They also plant a huge signpost indicating the direction in which E-commerce could develop in the next millennium

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NEXT WAVE
Optical fiber is
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From stock
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BUSY STREET
The Dow may
well be headed
for 10,000.
Here's why

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ON AT MICROSOFT?

of its temps want to organize

ence & Technology

PING THE LIGHT FANTASTIC

al fibers carry so much data,
communications could one day be free

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ormation Technology

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e Web robots aren't great shoppers

US TRIPLE PLAY

plitting its product line in three, the
maker has kept sales heading north

ernational Business

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Up Front

EDITED BY ROBERT McNATT

THE DEAL MILL

MORGAN STANLEY: THE RAPTURE

SAYS GARY PARR, MORGAN Stanley Dean Witter's co-head of mergers and acquisitions: "I don't want to look like I'm beating my chest." He's recalling the investment bank's extraordinary involvement on Nov. 23, when nine big mergers hit the market.

Merger Monday at Morgan

BUYER/TARGET	ESTIMATED FEE (MILLIONS)
DEUTSCHE BANK/BANKERS TRUST	\$48.5
SIEBE/BTR	17.1
UNUM/PROVIDENT	14.6
AMERICA ONLINE/NETSCAPE	14.0
B.F. GOODRICH/COLTEC	7.0
DAY'S TOTAL	101.2

Morgan Stanley represented the seller in all cases except Deutsche-BT. Fees are estimated by Securities Data from historic data provided by Morgan Stanley.

Well, Gary, it's O.K. to brag a little. In one record day, Morgan helped close five of those transactions. The deals totaled \$26 billion. So what's it all mean to Morgan?

A lot. By the end of that day, the market value of Morgan's stock jumped by \$1.8 billion, to \$42.5 billion, as its shares gained over \$3, closing at 73%. Then there was an estimated \$100 million in fees from the deals. Says Richard

Peterson, market strategist at Securities Data: "It was an early Thanksgiving."

The rebound in merger activity didn't surprise Parr: "We are pretty confident that once the market stabilized, merger activity would come back." So investment bankers are once again looking at healthy bonuses. *Joan Oleck*

CORPORATE CULTURE

'COFFEE, TEA, OR MILK, MAGGOT?'

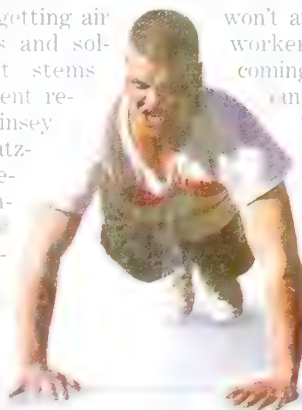
WHAT DOES THE FAMOUSLY fun-loving and successful corporate culture of Southwest Airlines have in common with the gung-ho military style of the U.S. Marines? Both organizations will find out in December, when they meet at the Marine base in Quantico, Va., to compare management techniques.

The idea of getting airline employees and soldiers to meet stems from management research by McKinsey & Co.'s Jon Katzenbach. In preparing a forthcoming book about employ-

ee motivation, he studied Southwest, long known for its worker loyalty. He was also intrigued by the Marines' work ethos. Both groups, he says, motivate workers using emotion, not just reason.

Katzenbach eventually brokered a two-day meeting between Marine officers and managers from Southwest, which knew he was studying the corps. About 20 participants from each side will meet to learn from one another. Southwest CEO Herb Kelleher

won't attend. But airline workers who do are coming with their civilian sensibilities intact. Says spokesman Ed Stewart: "A lot of people who got selected said, 'Hey, they're not going to be yelling at us, are they?'" *Windy Zetter*



THE FEW, THE PROUD... The

TALK SHOW "Does anyone need an aspirin?"

—Representative Henry Hyde (R-Ill.), chairman of the House Judiciary Committee, as Democrats groaned over an overly long impeachment hearing with Ken Starr

FUND FRONT

THIS TIGER IS LIMPING

WHAT A DIFFERENCE A MONTH makes. Julian Robertson Jr.'s \$20 billion hedge-fund group, Tiger Management, was up 17% (after fees) through Sept. 30, while U.S. markets slumped. That was among the best performances of the large "macro" hedge funds that bet on moves in the global markets. But in just a few weeks, the Dow has come charging back, while the tiger has lost its roar.

Robertson's offshore Jaguar Fund, which mirrors the performance of Tiger's other funds, has been pummeled, in part by a bet on the dollar against the yen, which has been on the upswing. Jaguar fell 18% in October, and declined an additional 4% in November's first three weeks. For the year to date, Jaguar

is down 8.1%, vs. a gain of 20.4% for the S&P 500.

Generally, macro funds also outdid Jaguar. Hennessey Group Macro Fund was down just 2.1% in October. Leon Cooperman's Omega fund, for exam-



gained 0.5% in October, and George Soros's Quantum Fund fell 6.5%.

Moreover, fund watchers say these funds will generally report better numbers in November. One fund consultant noted that Quantum has been betting on the dollar and also heavily invested in the U.S. market. *Gary L.*

PAPER PLAYS

A PRISON (COMPANY) UPRISING?

MOST SHAREHOLDER VOTES are ceremonial affairs, with stockholders rubber-stamping management's proposals. Then there is Corrections

support in late November may suffer a rare defeat in the Dec. 1 balloting.

Among those opposing the deal is the AFL-CIO, which



DEALBUSTER? AFL-CIO's Sweeney

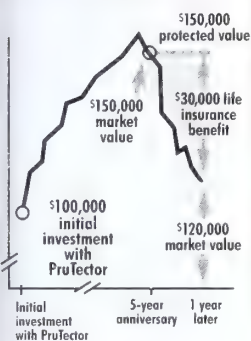
Corp. of America, the nation's largest private prison operator, with an estimated \$660 million in 1998 revenues. It wants to merge with the publicly traded real estate division it spun off last year and in turn, spin off some operations into three privately held companies. But management, which claimed 34%

claims credit for a similar deal at Marriott International last year. The union, led by John Sweeney, holds 0.5% of the shares. Washington-based Institutional Shareholder Services (ISS), which advises on the deal, says the union's opposition is "unusual and pensioners' interests are also urged."

"no." ISS says CCA shareholders will do badly on the deal. ISS also dislikes the plan to shift CCA's fast-growing private management operations to private companies, 58% controlled by CCA execs. Management defends the deal, saying it will provide easier access to capital for expansion. *Dean O.*

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In this hypothetical example, an initial investment of \$100,000 in a Prudential mutual fund grows to \$150,000 by the fifth anniversary of purchase. PruTector locked in \$150,000 as the protected value on that anniversary. One year later, the investment declined to \$120,000. If the insured were to die at that time, beneficiaries would still receive \$150,000 (\$120,000 market value plus \$30,000 life insurance benefit). This hypothetical example is not intended to represent any specific investment, and is not indicative of past, present or future performance. Depending on market circumstances, the life insurance benefit could be zero.

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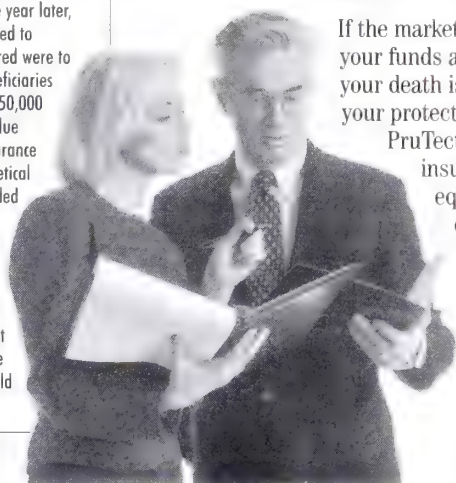
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Up Front

AFTERLIVES

IS THIS WOMAN A BABY BELL KILLER?

CATHERINE HAPKA MADE HER reputation building data networks for telco giant U S West, expanding her division over four years from zero to a \$400 million business. In 1992, she was named one of BUSINESS WEEK'S Top 50 Women in Business. But now, Hapka has switched sides.

These days, she is competing against her old employer. As CEO of telecom upstart Rhythms NetConnections, Hapka hopes to take on U S West and the other Baby Bells. The battleground is the fast-growing market for high-speed digital subscriber lines (DSLs), which combine data, voice, and video. Investment



HAPKA: Digital headway

bank Hambrecht & Quist predicts a \$35 billion industry by 2001. Hapka, 44—who has steered Rhythms its entire 20 months—is marketing her DSL service to small companies and corporate teleworkers. “We take the copper that runs inside your phone system,” she boasts, “and put it

on steroids.”

The Englewood (Colo.) company hopes for a presence in 12 cities on both coasts by yearend. Backers already include venture-capital firm Kleiner Perkins Caufield & Byers, which has ponied up \$5 million, and Enron Communications, with \$10 million. And the newly liberated exec? Life inside U S West was “like being inside a Model T,” says Hapka. But at Rhythms, “I feel like I’m in a Ferrari.” *Dennis Berman*

CORPORATE CULTURE

SCROOGE CRASHES THE OFFICE PARTY

WITH THE COMPANY HOLIDAY party just around the corner, you may be thinking champagne and caviar. Bad news: Cheap beer and pretzels may be more like it. 'Tis the season to be frugal, said 75% of chief executive officers when asked about their companies' holiday parties. Unsettled

conditions in the stock market, as well as in some foreign economies, have made them think about austerity “a little bit more seriously,” says Jeff Christian, CEO of Christian & Timbers. His search firm conducted the survey. Christian sees party spending as much as 20% below 1997 levels.

Caterers confirm his suspicions. “People are thinking clever instead of opulent,” says Dan Fehlig, owner of The Upper Crust, a Manhattan caterer. Some of his clients are doing Christmas this year with a North African theme, throwing Moroccan holiday parties with belly dancers and flame swallowers instead of hiring a big band. With swing music in fashion, the bands are chic—but expensive. In such ways, planners hope, a little imagination can still make this a holiday to remember. *Jeanette Brown*



DRAWN & QUARTERED

AKRON ZEECON ADVERTISING



POLLUTION SOLUTION

A SEAT CUSHION BY ANY OTHER NAME ...

IT MAY NOT DO ANYTHING TO help global warming, but it sure might help cut down on noxious emissions in the office. It's the Flatulence Filter, made and sold since 1995 by Houston-based UltraTech Products. The 15-in.-by-17-in. gray seat cushion is filled with activated charcoal granules that absorb the offensive odors.

Now UltraTech is boasting that scientists have independently validated its effectiveness. A recent issue of *Gut*, a journal of gastroenterology put out by the British Medical Assn., noted

that the cushion “effectively limits the escape of these fur-containing gases into environment.” The study was done at the Minneapolis Veterans Affairs Center, where researchers ensured the cushion's absence of gas from 16 subjects who ate lots of pinto beans.

While you might not

to get the Flatulence Filter for Christmas, it does serve a serious purpose: It was invented by a diabetic, H. Lathrop, who suffered severe gas from a low-fiber diet. The filter uses the same technology as the gas mask.

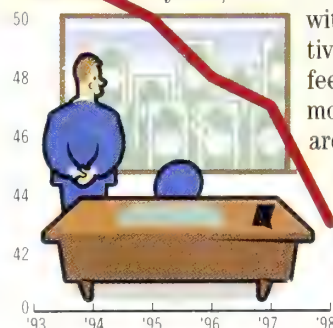


YUCK: Sit down, please

wore during Desert Storm. For UltraTech, which sells the cushions by mail, the news from the *Gut* was sweet indeed. *Ellen L...*

THE BIG PICTURE

CAN'T GET NO SATISFACTION Although wages have been outpacing inflation in a tight labor market for two years, workers are increasingly dissatisfied with their pay. Perhaps positive conditions make them feel secure enough to demand more. A sidelight: Employees are less worried about layoffs.



PERCENT OF EMPLOYEES AGREEING
“From what I hear, our pay is as good as or better than the pay in other organizations”

STUDY OF 405,593 U.S. EMPLOYEES CONDUCTED THROUGHOUT 1998
DATA: INTERNATIONAL SURVEY RESEARCH

FOOTNOTES U.S. workplaces with “flextime” programs in 1993: 40%; in 1998: 61%



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Expanding Possibilities

ers, whereas previously there had been heated discussion in Germany on the use of Citibank data processing in Israel. The objective of the European rules is to "dictate its norms to the rest of the world." Our rules are intended to ensure that European companies guarantee European citizens' constitutional rights, even if the companies export data from them. Our hope is only that the law from which we inherited the data privacy in the 1960s will it complete the step it started.

Hansjurgen Garstka
Data Protection Commissioner
Berlin

say for the European Union and privacy inspectors! I'm an Audubon member, but I can certainly find bird-feeding without having my privacy invaded. Hearing on some huckster's mailing couldn't it be great if Americans thought they could trust their government to look after their interests as Europeans apparently do?

Ken Smith
Santa Ana, Calif.

ROAD WORKERS FOR FINDING ' AND THEY'LL FIND PLENTY

is surprised to learn Boeing Co. workers aren't better students of technology ("O.K., think—where is the trench?," Up Front, Nov. 16). Regretful workers for discovering foreign-debris reminds me of the days when software development was just getting to mature. Managers started to hire programmers for discovering bugs in computer programs. Sure, the discovery rate increased, but so did the bug-creation rate.

Brian T. Brunn
Lakeville, Minn.

OR NOT, ISRAEL'S ECONOMY IS SOUND

Regarding "The Achilles' heel of Israel's peace process: Economics" (International Outlook, Nov. 9): While the peace process will undoubtedly enhance the economic outlook, Israel's fundamentals remain sound.

In 1997, receipts from the privatization of Israel's major industries totaled \$3 billion. Last year was also a record year for foreign investment—some \$3.7 billion. In 1990, there was one venture-capital firm operating in Israel; today, there are more than 50. Many investors are seeing opportunities in our high-tech sector where, in the Internet arena alone, we have pioneered more new technologies than any country outside of the U.S. and most other developed countries.

Israel has been affected by the fallout of the global economic crisis. Yet independent sources continue to give Israel high marks: an "A" credit rating from Standard & Poor's, and an "A3" from Moody's Investors Services. In addition, with a highly educated labor force and high-tech industry base, Israel is well poised for future growth.

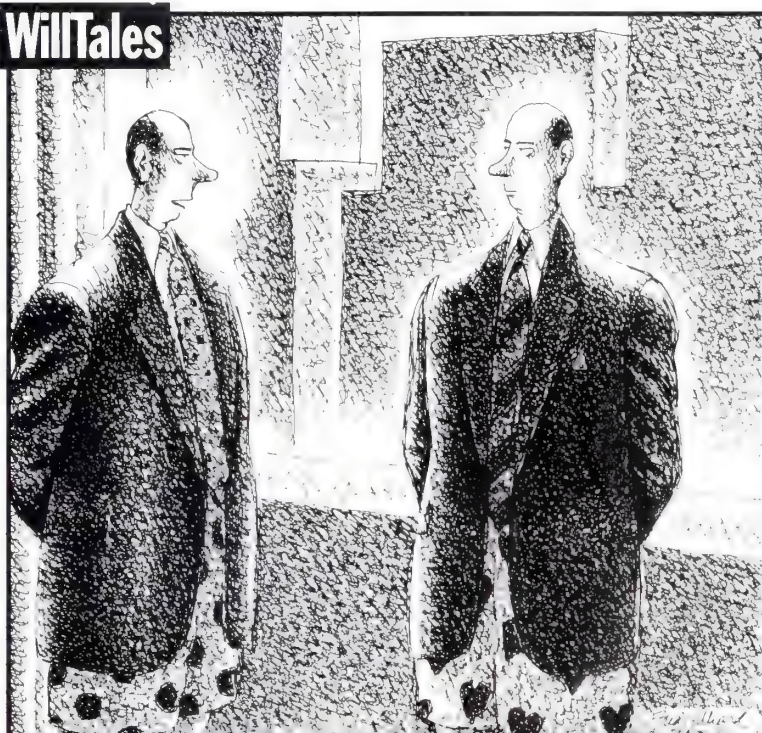
Ron Chaimovski
Economic Minister to North America
Government of Israel
New York

WHY CLIMATE PROTECTION MAKES SENSE FOR THE PRIVATE SECTOR

John Carey deftly captures the passing of climate leadership to the private sector ("Look who's thawing on global warming," Environment, Nov. 9). Many smart companies are behaving as if the U.S. Senate had already ratified the Kyoto Protocol. Why? Because saving energy costs less than buying it, often yielding return on investment of over

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100% per year, and implementation obstacles can be turned into business opportunities. The more companies so behave, the more likely and less necessary ratification will become.

Besides these immediate profits, companies can earn early carbon credits for later resale. International negotiations to set trading rules have been leapfrogged by a dozen traders making markets in greenhouse-gas abatement and sequestration. As these unofficial markets spread, the prices discovered in them—currently a hundredfold less than doomsayers' models predict—will discredit those models, substitute for fears of high costs the reality of lucrative profits, and further shift climate politics. No matter how the science turns out, the leaders in profitable climate protection will thus gain competitive advantage, and we'll all gain a stronger economy and a cleaner, safer world.

Amory B. Lovins
Senior Vice-President
Rocky Mountain Institute Inc.
Snowmass, Colo.

HOW TO END THE SHORTAGE OF ORGAN DONORS

"Who should get the transplant?" (Science & Technology, Nov. 9) poses a difficult question: How do we determine who will get the opportunity for a new lease on life and who will die? There are 41,000 people nationwide on the waiting list for kidney transplants, and only 8,500 transplants expected.

Resolution of the debate over allocation based on patient "need" and geography is not going to address the real problem—the severe shortage of donor organs. Instead of introducing more government regulations, there is a simple, more equitable way to decide which patients are first in line to receive life-saving organs.

A program encouraging healthy people to sign organ donor cards as "insurance" against their own possible future medical needs would result in a significant increase in available organs. If preference is given to transplant candidates based on their own sign-up date as organ donors, there will be enough organs for all the patients on the waiting lists.

Bonnie Le Var
Research Associate
Institute for SocioEconomic Studies
New York

DIVX AND DVD AREN'T DUELING VIDEO DISK FORMATS

Conspicuously missing from "8-tracks, betamax—and Divx?" (Science & Tech-

nology, Nov. 9) that puts Divx and DVDs into opposing camps was one key ingredient: the other format. Divx is a feature within the DVD format, and DVD players enhanced with the Divx feature play all DVD disks. It is this compatibility with DVD that should hasten the mass-market embrace.

DVD players with the Divx feature offer consumers the choice of enjoying movies on basic DVD as well as the more affordably priced Divx disks. For this reason, six DVD manufacturers—Zenith Electronics, Thomson (RCA/ProScan), Matsushita Electronics (Panasonic), JVC, Pioneer, and Harman Kardon—have chosen to offer Divx-enhanced DVD players. Unlike the comparisons you draw with formats now collecting dust, Divx is not a "rival format" but a value-added feature that gives consumers more choice.

Josh Dare
Director, Communications
Digital Video Express
Richmond, Va.

WHAT THE IMF REALLY PRESCRIBED FOR MALAYSIA

In "Malaysia could do worse than this economic plan" (Economic Viewpoint, Nov. 2), Robert J. Barro first outlines what a typical central bank would like to be able to do when faced with a run on its currency—namely, sterilized intervention—to protect the economy from a loss in international reserves and money stock. He correctly points out that, ultimately, the central bank will come dangerously close to running out of reserves, and the currency will have to be devalued. He recommends instead that the central bank not sterilize and allow the money stock to decline. So far, so good.

Barro mistakenly terms the International Monetary Fund's policy advice as one of "sterilized intervention coupled with high interest rates." Economic theory will tell you that sterilized intervention (which aims to keep the money stock from falling) is fundamentally inconsistent with higher rates. The fact is that IMF-supported programs were originally formulated in an environment of plummeting exchange rates, rapid capital outflows, and shattered investor confidence. Interest rates had to be raised initially to stabilize exchange rates.

In Barro's parlance, Fund-supported programs in fact called mostly for unsterilized intervention. Over the past few months, exchange rates have not only stabilized but have even begun to appreciate in many of the countries (including Malaysia), and some (notably Korea and Thailand) are rebuilding

reserves. And in all cases, interest rates have come down and are now even lower than pre-crisis levels.

The perplexing part comes when Barro recommends that Malaysia add a currency board and cavalierly states Malaysia has sufficient reserves. A currency board would require that the authorities accept high interest rates to defend the exchange rate and thereby serve position. Barro ignores the fact that the Malaysian authorities adopted their present strategy precisely to stabilize the economy by lowering interest rates without risking renewed capital outflows—clearly at odds with what would result from a currency board.

Kalpna Kodiyilattil
Deputy Division Chief
Asia and Pacific
International Monetary Fund
Washington, D.C.

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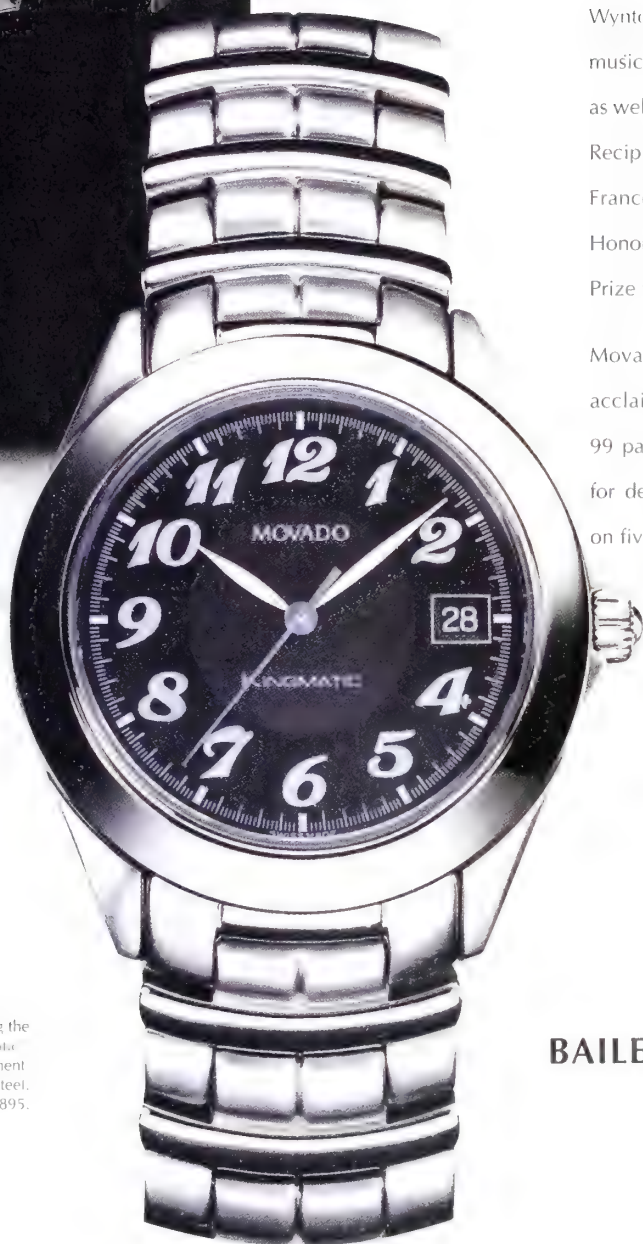


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BY STEPHEN H. WILDSTROM

'BOTS' DON'T MAKE GREAT SHOPPERS

Intelligent agents that search the Net often miss out on the best bargains

Like most other guys, I'm not terribly fond of shopping, especially at this time of year. In fact, I don't even much like shopping online: Web delays can make the server seem as slow as the mall. About the best I can say about Web shopping is that I don't have to look for a parking place.

So I should be a natural customer for a software technology that uses "intelligent agents" or "bots" (as in robots). These snippets of software are designed to scour the Web for the best prices on all sorts of goods, making online bargain hunting painless. Alas, this turns out to be another case where the hype is outrunning reality.

To test this new approach, I tried out three automated shopping services. mySimon is brand new and offers service through its own Web site, www.mysimon.com. Junglee and Jango are more established, and they power the shopping services on Web portals. I tried Junglee on Yahoo! (yahoo.junglee.com) and Snap (www.snap.com) and tried Jango through Excite (www.jango.com).

DEAD END. I shopped for a variety of potential gifts: TVs, cameras, golf clubs, toys, and kitchen equipment. Not one of the shopping services came close to turning up all the items I sought. And none consistently offered the best prices. In the end, I think I

did about as well using sites I was already familiar with or found using conventional search engines.

For example, I chose a 27-inch Sony TV, Model KV-27V22 available from online electronics dealer 800.com (www.800.com) for \$489.95. None of the agents found it there or anywhere else. mySimon did best, finding the fairly similar Model KV-27V40 at Best Buy Online (www.bestbuy.com) for \$499. The closest Junglee and Jango came was the KV-27V40 for \$50 more at Crutchfield (www.crutchfield.com).

Clicking For Savings On The Web

Shopping "bots" (as in robots), programs designed to scour the Web, sound like a great idea but are no R2D2. Test results out of maximum scores of four

SHOPPING "BOT"/ WHERE TO FIND IT

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www.snap.com

FINDING STUFF GOOD PRICES

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★★★
\$

★★★

An attempt to buy a camera went only slightly better. I chose a Canon EOS Elan II from Wolf Camera (www.wolfcamera.com) for \$599.95. mySimon found it for

\$519.95 at Abbey Camera (www.abbeycamera.com). Jango doesn't offer conventional film cameras. Junglee pretends to, but searches for any models of well-known makes came up empty.

KitchenAid mixers are favorites of serious cooks, and Appliances On Line (www.appliances.com) offers the Model K45ss Classic for \$175. Neither Jango nor mySimon offer cooking gear, but

Junglee tracked it down for an unimpressive \$239 at Factory-Mall (www.factorymall.com).

Finding the Microsoft ActiMates Arthur interac-

discovery.com) for \$199. mySimon didn't locate all. Junglee went back to F.A.O. Schwarz, which offered \$220. Jango found a remarkable price of \$149.95 at Chips & Bits (www.cdماغ.com), but the site was only taking "preorders," though the product has been available for a month.

BARRIERS. I had very little luck shopping for a Callaway Biggest Bertha Driver. Divot's Discount Golf (www.capecod.net/divots/chouse) sells it for \$369. mySimon and Jango both found it at Golf.com (www.golf.com) for \$289.99. Junglee, oddly, found only a women's model for \$349.99, at Fogdog Sports (www.fogdog.com). Some of the Internet life are responsible for these disparate and generally disappointing results. A lot of sites block bots because online retailers do not want to be searched and listed at a price to compare with their shopping service. Some retailers will strike a deal if one service can freeze the other out. The result is that none of the services deliver on its promise of comprehensive searching.

Meanwhile, online shopping (like its mail-order cousins) calls for some caution. Read the print on prices, because shipping and handling charges vary considerably. And make sure you know what you're getting. Particularly for cameras and consumer electronics, there's a lot of "gray market" merchandise that has been imported outside normal channels, and those products may or may not come with a valid manufacturer's warranty. High or low, the old advice applies: If a deal looks too good to be true, it probably is.

Lego's robot construction kit, MindStorms Robotics Invention System (BW—Oct. 12) posed more of a challenge. I found it at Discovery Channel Online (www.discovery.com) for \$110 at F.A.O. Schwarz.

Lego's robot construction kit, MindStorms Robotics Invention System (BW—Oct. 12) posed more of a challenge. I found it at Discovery Channel Online (www.discovery.com) for \$110 at F.A.O. Schwarz.

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THE RICHEST DYNASTY HISTORY?

How did they do it? That's the recurring question in Niall Ferguson's formidable *The House of Rothschild*, a history of the legendary German-Jewish banking family. "There is no one power in Europe and that is the Rothschild," said a French journalist in 1811, giving voice to the popular suspicion that the dynasty and its money played a sway over the affairs of nations. In the first of a two-volume study (the second is due out next year), Ferguson argues that often, the Rothschilds were behind the scenes, influencing politics across Europe in their own interest. However, the Oxford don also shows the family's limits to their power. With access to all extant Rothschild archives, Ferguson is well-positioned to separate myth from reality.

What has to be explained is how the Rothschilds rose so high from the obscurity of Frankfurt's 18th century Jew ghetto. Seemingly overnight, they placed themselves from Mayer Amschel Rothschild's coin dealership to become the world's richest family, with financial operations run by his five sons in London, Paris, Vienna, and Naples, as well as Frankfurt. Ferguson calculates in relative terms, they were richer than any dynasty today—even the Saudi family.

Their meteoric rise spawned several legends. In the first, Mayer Amschel was said to have hidden the fortune of Maximilian IX, ruler of the German principality of Hesse-Kassel, from the Napoleonic invaders and been rewarded for its long-term use. In fact, Mayer received only routine papers. It was Nathan's leveraging of William's shares in investments that later helped the Rothschilds a power in the City of London and on the Continent. The most widespread Rothschild legend was that Nathan, after receiving a letter by carrier pigeon of Wellington's

victory at Waterloo, made a vast fortune speculating on the rise in British government securities. The reality, says Ferguson, was quite different. The Rothschilds' couriers did alert them first to Napoleon's defeat, but since they had bet big on a protracted military campaign, any quick gains in bonds after Waterloo were too small to offset the disruption to their business.

Rothschild capital did soar—but over a much longer period. Nathan's breakthrough was a deal to supply cash to Wellington's army in 1814. Waging a high-risk campaign of exchange-rate transactions, bond-price speculations, and commissions, the family garnered huge profits from this governmental financing. Then, from £500,000 in 1818, Rothschild capital rose to £4,330,333 in 1828—about 14 times the resources of their nearest competitor, Baring Brothers, which had been a close second. Their strategy: financing the postwar stabilization of Europe's conservative powers. That meant luring monarchs and ministers, such as Austrian Chancellor Metternich, into their orbit. What made the Rothschilds "the dominant force in international finance after 1815" was "the sheer scale—and sophistication—of their operations."

One key to that scale was unity, a virtue that Mayer Amschel inculcated in his sons. That unity allowed the brothers—Nathan, James, Salomon, Amschel, and Carl—to run independent operations essentially as one firm stretched across Europe. Another advantage: By issuing foreign bonds in sterling, says Ferguson, the Rothschilds did much to create the international bond market. And as they returned profits to the firm,

excluded "outsiders"—in-laws, women, even their sisters' sons—and married off their children to first cousins, they added to their capital.

What these kings of the bond market craved was peace and stability, and they avoided lending to belligerent or unstable states. As Ferguson notes, however, there was an internal contradiction: The primary reason for states to borrow money was to wage war, which was what the Rothschilds worked to prevent in order to protect the bond market. One way out of this trap: moving into railway shares, which they saw as "surrogate state bonds."

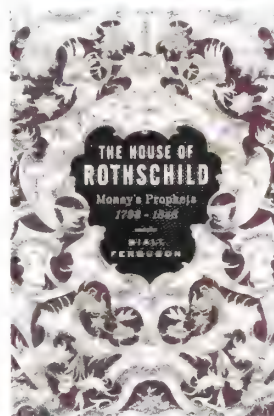
The Rothschilds could be vulnerable. Fame brought a barrage of ugly anti-Semitic attacks. And despite their fear of instability, the Rothschilds were unprepared in 1830 and 1848, surviving the 1848 revolution only because of a timely silver shipment from their semi-independent New York agent, August Belmont. The rescue serves as a reminder of their biggest strategic error: the lack of a major U.S. operation.

Ferguson's fluid, masterful synthesis of a vast amount of material tends more toward the academic than the popular. But he brings vitality to a series of compelling issues, ranging from the Rothschilds' staunch Judaism to their intrafamily marriages. He makes brilliant use of literary sources from Disraeli to Balzac, and he is insightful about the Rothschilds' friendship with such musicians as the composer Rossini. Nathan and James come across as rude, hard-driving businessmen. It's not always a pretty picture, but by revealing what the Rothschilds were really like, Ferguson is better able to explain their achievement.

Were the Rothschilds pacifists, pillars of conservative monarchies, or, as the poet Heinrich Heine wrote, agents of a new revolutionary force, money? Chameleon-like, the Rothschilds were all—and none—of these things. For them, it was just business.

BY JOSEPH MANDEL

Copy editor Mandel is working on a history of a family of French glass-makers.



SEEMINGLY OVERNIGHT, THE ROTHSCHILDS BUILT A FORTUNE TO RIVAL THE SAUDIS' TODAY

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BY ROBERT J. BARRO

THE IMF DOESN'T PUT OUT FIRES, IT STARTS THEM



ENABLER:
With help
from the U.S.,
the fund
encourages
bad economic
policy by
rewarding
failure with
showers of
money

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu).

Congressional Republicans disgraced themselves before the recent elections by acting like Democrats. They approved far too much new federal spending, the worst of which was the \$18 billion for the International Monetary Fund. No doubt some in Congress were convinced by President Clinton's argument that the IMF was the world's fire department, which ought not to be deprived of water while the fire was burning. But a better analogy would be to Ray Bradbury's *Fahrenheit 451*, in which the fire department's mission is to start fires.

The politics of IMF funding is as clear as it is insidious. If Congress does not provide money for the fund to bail out, say, Brazil, and Brazil collapses, then Congress gets blamed. But no one is willing to blame Congress if the IMF actually works to encourage Brazilian-type financial crises time and again. Some economists believe that bailouts increase "moral hazard" by rewarding and encouraging bad policies by governments and excessive risk-taking by banks. Aware that they can be bailed out in the crunch, banks will often lend at interest rates that do not reflect fundamental risks. This, in turn, generates new financial crises and reduces world economic growth.

In Asia, a flood of low-cost capital from Europe, Japan, and the U.S. wound up financing real estate speculation and overcapacity, thanks in part to an assumed IMF "guarantee." But nobody will ever be able to prove that the IMF effectively starts new fires in this way. Hence, the political forces favor IMF funding and limitless bailouts.

CRUTCHES. IMF economists like to argue that these moral-hazard problems are minimal. But consider the case of the recent \$42 billion package for Brazil. How did the Brazilians qualify for this support? They did so mostly by not exercising sound fiscal policies. If their policies had been better, they would not be in their current difficulties and would not qualify for IMF money.

Russia is another example. In most respects, effective reforms in Russia ceased by 1993. Since then, the availability of IMF and other foreign money provided an excuse to avoid making tough political decisions. Instead of cutting public outlays or increasing tax collections, undertaking efficient privatizations or enacting legal reforms, the government counted on foreign

bailouts to hold things together.

An interesting question is what the government will do now in Russia. The current government will never formulate a sensible economic plan, and the fund therefore cannot demand that new lending be conditioned on sound policies. But if no money is forthcoming, then Russia will default on past IMF obligations, and the IMF will no longer be able to pretend that it always gets repaid. My prediction is that the IMF will come up with a way to keep up the chain-letter game, which it provides Russia, Ukraine, and Indonesia with enough money to keep paying "current."

MEXICAN MESS. The sequence of unrestrained global bailouts began with Mexico in 1995. In this case, the IMF-U.S. lending package was effectively a reward for corrupt and reckless bank lending and poor macroeconomic policy. Particularly striking were the massive interventions of the Mexican central bank in an attempt to support the peso. The bank failed and lost billions of dollars in international reserves, but did not allow the money supplier to contract. Not surprisingly, this policy failed to prevent a sharp devaluation of the currency.

The Mexican bailout kept foreign lenders whole. The mountain of bad bank loans, amounting to 16% of gross domestic product, became the liability of Mexican taxpayers. The bailout did not avoid sharp economic contraction or high inflation—both much worse than in Argentina, which ties its money supply directly to its international reserves.

The real shame of the Mexican bailout was that it was judged by many observers to be a success, mainly because the U.S. Treasury got repaid. If, instead, it had properly been labeled as a massive policy blunder, then subsequent unrestrained global bailouts might not have occurred. Countries such as Brazil and Russia would have had the appropriate incentives to implement good policies, instead of knowing that the IMF or the U.S. would respond to bad policies with showers of money.

One healthy consequence of the recent global financial crisis is the emphasis on increased transparency in financial transactions. In this spirit, the IMF might consider changing its name to the IMH—the Institute for Moral Hazard. Better yet, the IMF should admit that it was insolvent and go out of business.

ASHTON FOR THE SOUL

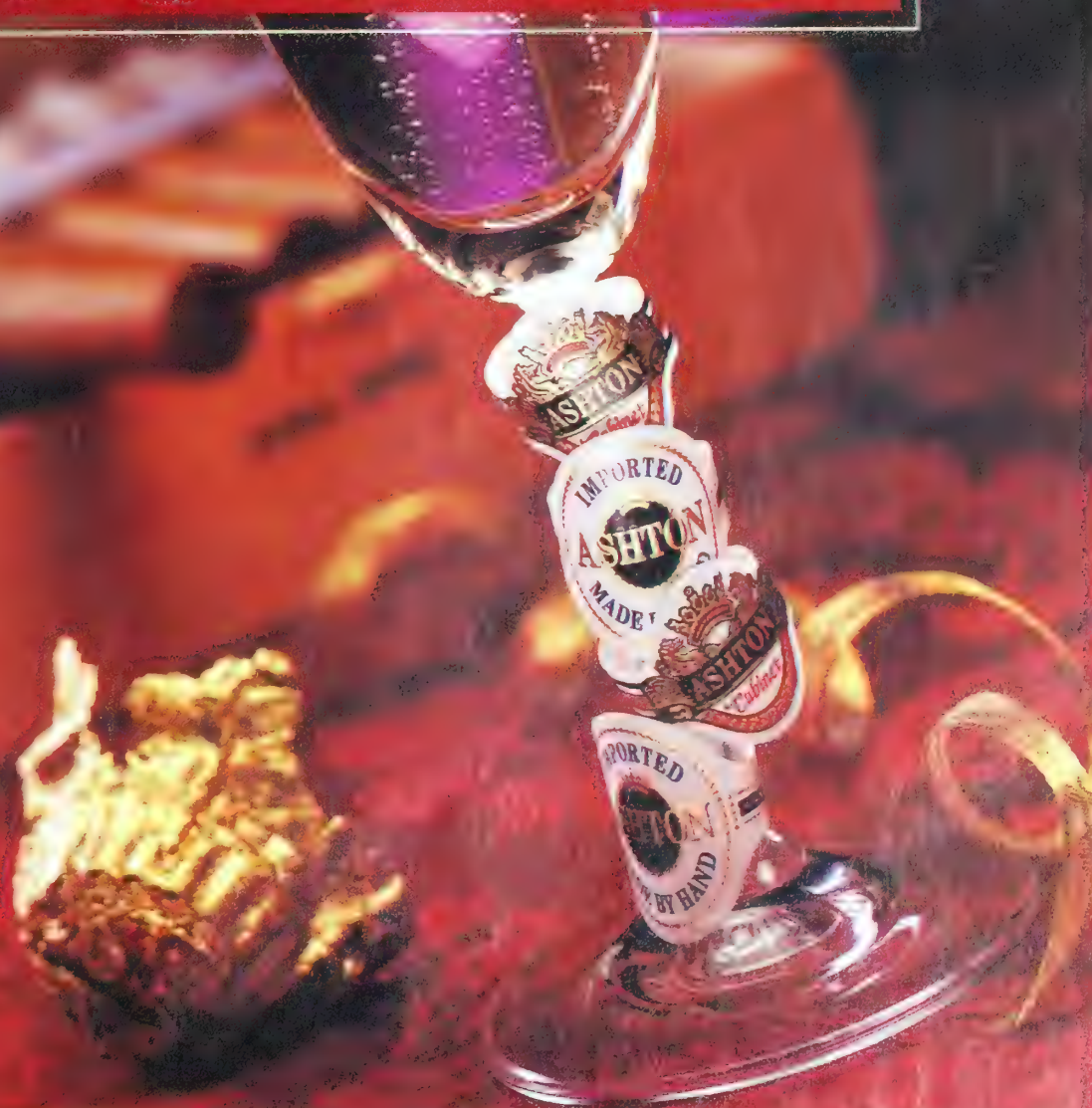


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BY GENE KORETZ

WHO'S REALLY INVESTING MORE?

America's poor record is a myth

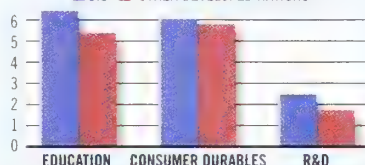
A curious inconsistency has long puzzled U.S. economic observers: On the one hand, published international data have indicated that America's capital investment as a share of gross domestic product has persistently lagged that of other industrial nations in recent decades. The average investment ratio in Canada, Japan, and European countries in the early 1970s, for example, was about 33% higher than in the U.S., and by the early 1990s, it was still 20% greater.

Meanwhile, U.S. real income per capita has grown as fast as in other de-

WHERE U.S. INVESTMENT HAS LED THE PACK

SHARE OF NOMINAL GDP 1970-94

■ U.S. ■ OTHER DEVELOPED NATIONS*



▲ PERCENT

*BELGIUM, BRITAIN, CANADA, DENMARK, FINLAND, FRANCE, GERMANY, ITALY, JAPAN, THE NETHERLANDS, NORWAY, SWEDEN
DATA: MILKA S. KIROVA, ROBERT E. LIPSEY

veloped nations since the early 1980s. And average incomes have remained more than 33% higher in America than in its developed peers.

How has the U.S. managed to stay so far ahead of the pack in income terms while plowing so much less output into investment? In a study published by the Federal Reserve Bank of St. Louis, economists Milka S. Kirova of Washington University of St. Louis and Robert E. Lipsey of the City University of New York argue that capital investment in the U.S. has been far higher than conventional measures indicate.

For one thing, measuring investment by looking at nominal outlays as a percent of GDP overlooks the fact that capital-goods prices are appreciably higher in some countries than in others and exhibit different inflationary trends. As it happens, U.S. capital-goods prices are not only lower than in other nations, the authors note, but have also been declining far more rapidly relative to overall inflation. Thus, they find that

real investment as a share of GDP in the U.S. has actually been rising since the early 1980s.

On the other hand, similar price adjustments reveal that the average real capital-formation ratio of other developed nations has been slipping for most of the 1970-94 period. As a result, Kirova and Lipsey find that the gap between U.S. and foreign investment ratios, measured in real terms, had almost disappeared by the early 1990s.

That's not all. Economists have long argued that the concept of investment should be widened to include such items as spending on education, R&D, and consumer durables on the grounds that they enhance growth or remain useful for extended periods. Thus, the authors added such outlays to their calculations of capital-formation ratios.

The results cast light on why America's lead in living standards has stayed so large. Counting outlays on education, R&D, consumer durables, and military capital goods as investment, and adjusting for the inflation and price differences noted above, Kirova and Lipsey estimate that U.S. real capital formation as a share of GDP was only slightly lower than the average of other developed countries in the 1970s and has since surpassed it—by about 7% in the early 1990s.

"Real investment per worker, broadly defined, has recently been running about 35% higher in the U.S. than in other industrial nations," says Lipsey. "As long as these trends continue, it's difficult to see how the gap in income levels can be closed."

HOW THE TITANIC HIT WALL STREET

Stocks in the wake of the disaster

The conventional view is that the stock market was far less efficient in the early part of the 20th century than in the post-World War II period. That is, not only was information less accessible, but investors were less sophisticated and far slower in evaluating and acting on new data.

If the market's reaction to the sinking of the Titanic in 1912 is any guide, however, investors were pretty sharp even in that pre-"efficient market theory" era. An article in the *Financial Analysts Journal* by Arun Khanna, a doctoral student at Purdue University's Krannert Graduate School of Management, tells the story.

As Khanna notes, the Titanic was

owned by the White Star Line, which was a subsidiary of International Mercantile Marine (IMM), a company traded on the New York Stock Exchange. The ship cost \$7.5 million to build and was insured by Lloyd's for \$5 million, so the net loss to IMM was about \$2.5 million.

Before the disaster struck, IMM's common and preferred stock were worth about \$15.6 million. To estimate the impact of the Titanic's sinking on the shares, Khanna looked at their price movements relative to the Dow Jones industrial average on Apr. 15 and Apr. 1912, the day the news of the tragedy first broke and the day after.

Khanna calculates that the market-adjusted returns on IMM's common and preferred stock over the two-day period were equivalent to a decline of \$2.6 million in the value of IMM—uncannily close to the \$2.5 million actual net loss suffered by the company. "As far as the Titanic was concerned," he says, "the market's reaction was surprisingly efficient."

CASH REGISTERS A-JINGLING

Holiday spending plans look strong

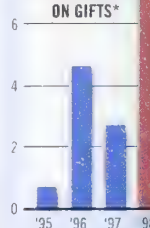
With the stock market testing new highs, consumer confidence seems to be rebounding—and with it the eagerness to splurge in the holiday season.

Not only did the University of Michigan's consumer-sentiment index bounce back in early November from its October slump, but the Conference Board's annual pre-Thanksgiving Day survey of households' Christmas gift-giving intentions showed the largest annual increase in the survey's 12-year history.

According to the survey, American families will spend an average of \$49 on gifts during the Christmas season this year, up 7.1% from the amount projected last year. "Based on a 1% margin of error, we expect holiday retail sales to rise 6% to 7% this year, moving into the \$50 billion range," says Lynn Franco of the board's Consumer Research Center. Given the low rate of inflation, that suggests real retail sales could rise as much as 5%.

MORE WORK FOR SANTA

PROJECTED RISE IN OUTLAYS ON GIFTS*



▲ PERCENT
*BASED ON NOVEMBER HOUSEHOLD SURVEYS
DATA: CONFERENCE BOARD

JAMES C. COOPER & KATHLEEN MADIGAN

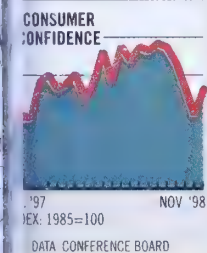
THE SLOWDOWN TAKES A RAIN CHECK

still likely in 1999, as profits soften, but it will develop only gradually

U.S. ECONOMY

A lot of economists must be scratching their heads about Ever since last summer's global financial market oil, forecasters generally have been expecting degree of slowing in the U.S. But so far, there is evidence that the economy has lost much, if any, of first-half vigor. In fact, the Federal Reserve's aggressive easing in recent weeks, which already has Street partying again, adds stimulus that will flowing into demand in the first half of 1999.

AN UPTURN IN HOUSEHOLD SPIRITS



Clearly, the second half of 1998 isn't shaping up to be much of a slowdown. Based on the Commerce Dept.'s revisions to gross domestic product, the economy grew at a solid 3.9% annual rate in the third quarter—compared with 3.7% in the first half. Third-quarter GDP was revised up from an already surprisingly strong 3.3% pace, mainly because overall demand grew faster than first estimated. And in the fourth quarter, consumer spending is on a tear to match—or exceed—the third quarter's energetic 4.1% growth rate, and homebuilding is still booming. Consumers have recovered some of their confidence (chart), partly because the Dow Jones industrial average has regained all of the 1800 points it lost this summer. And the Fed says that banks are as willing as ever to make consumer loans. True, slower inventory turnover is likely to cut into GDP growth this quarter and foreign trade will still be a drag. But with domestic demand still so solid, it will be hard to call that a slowdown.

WASTE THIS MOMENTUM, slower growth in 1999 is the most likely scenario, and the ongoing profits recession is the reason. Commerce says that third-quarter operating profits fell from the year before for the first time in six years, despite the strong economy (chart). Profits will remain under pressure as long as the economy is in prices and productivity are not strong enough to offset rising labor costs.

Weak profits, plus costlier credit, are bound to put upward pressure on capital spending and hiring. Indeed, initial claims for unemployment benefits have ticked up in recent weeks, suggesting some loos-

ening in the labor markets. That will eventually cap income growth. Moreover, the drag on manufacturing from weak exports will continue, if not as intensely as in 1998.

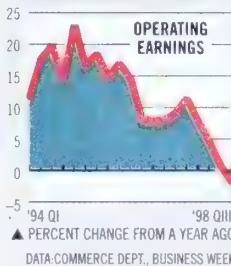
But because of the economy's surprising resilience, any slowdown in 1999 is likely to develop gradually. Consider that, for all the hand-wringing over Asian fallout this year, especially on Wall Street, U.S. economic growth has barely slowed. Even if fourth-quarter GDP growth is half the third quarter's pace, the economy will advance 3.3% this year, only a half point below the spirited 3.8% showing in 1997.

Credit that to booming domestic demand, led by an expected 5% growth rate in consumer spending this year. That kind of striking growth is almost never seen this far into an economic expansion. The powers behind it: the strongest job market in a generation, low inflation that has boosted real wages, and accommodative financial conditions, including low interest rates and a bull market in stocks.

THEREIN LIES A DILEMMA for the Fed. The central bank has cut interest rates three times since Sept. 29, with the purpose of assuring stability in the financial markets. In its recently released minutes of the September meeting, the Fed said the move would "cushion the effects of more restrictive financial conditions." But that cushion might act as a trampoline to catapult the already strong consumer and housing sectors, partly by giving banks even more incentive to lend to consumers, and partly by refueling the bull-market psychology on Wall Street.

In fact, banks show a constant willingness to make consumer loans even as they tighten their lending standards for business borrowing. The Fed's latest quarterly survey of senior loan officers says that more than a third of U.S. banks have tightened their borrowing requirements for large and middle-market companies. That's the highest share reporting tighter standards since 1990. Bank loans to businesses are growing rapidly, because many companies now find bank loans cheaper than borrowing on the credit markets. Banks, however, are getting

THE FADING MOMENTUM IN CORPORATE PROFITS



pickier. For consumer loans, on the other hand, the survey shows "little evidence of any changes in lending practices." And consumer installment debt, which surged \$8.4 billion in October, has sped up this year.

EASIER FINANCIAL CONDITIONS are one reason why consumer spending shows no sign of letting up. October car-buying and retail sales were strong, and November retail surveys show continued gains. Also, the Conference Board's index of consumer confidence rebounded nearly 7 points in November, to 126. And why shouldn't it? Stock prices have recovered, the impeachment of President Clinton is less likely, and the Fed is cutting rates. Consumers' feelings about the future snapped back sharply, as the index of expectations scored its largest monthly gain in five years.

And in a separate survey, the Board reported that despite recent uncertainties, American families plan to spend an average of nearly \$500 on holiday gifts this year. The increase from \$465 in 1997 is the largest in the survey's 12-year history, and the Board concludes that the holiday buying season could be "a blockbuster."

Some of those purchases will go into all the new homes that are being built and sold. Housing starts jumped 7.3% in October, the largest monthly advance in more than a year. That means starts began the quarter well above their third-quarter average.

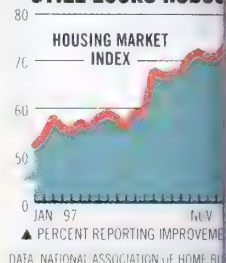
The strength in starts should not be surprising,

given the wildly upbeat assessment of market conditions offered by builders. The National Association of Home Builders' housing market index, which gauges builders' views on present and expected sales as well as buyer traffic through model homes, surged to a record 78% in November from October's 73% reading, which was the previous record (chart). The index suggests that new-home demand continues to rise.

To be sure, the risks of a sharp slowdown have not gone away completely. Weak exports are still hammering manufacturing, and capital spending on new equipment and buildings is already slowing. Factory orders for durable goods declined a broad 1.7% in October, and bookings for nondefense capital goods dropped 7.2%. Both order levels are below their third-quarter averages.

Another big risk would be a new round of financial market turmoil, especially if the profits recession worsens. That could squeeze business even further, and other stock-market swoon could throw a scare to consumers. But barring that scenario, the 1999 economy may end up looking a bit better than many folks expected a few months ago.

THE HOUSING MARKET STILL LOOKS ROBUST



CANADA

WITH RATES DOWN, THINGS ARE LOOKING UP

The Canadian economy may have dodged a bullet—with help from the Federal Reserve. After boosting its overnight rate by a full percentage point on Aug. 27 in defense of the sagging Canadian dollar, the Bank of Canada (BOC) calmed recession worries on Nov. 18, when it cut rates by a quarter point for the third time in seven weeks. The easing moves came in lockstep with Fed actions, and at little cost to Canada's bruised currency.

Before the Aug. 27 hike, Canada's policy rate stood at 5%, vs. 5½% in the U.S. The disparity caused currency speculators to swoop down on the loonie, driving it to a record low near 63¢ U.S.

Now, with Canadian rates at 5¼% vs. 4¼% in the U.S., the loonie is better supported, at 64.5¢ on Nov. 24. The Canadian rates also are more conducive to growth.

To be sure, the Canadian economy faces a slowdown. The BOC said as much in its semiannual monetary policy report on Nov. 16, when it revised its May forecast of 3½% growth in 1999 down to a range of 2¼%-3¼%. That's still high compared with most private forecasts,

which generally expect growth of about 2%. The economy expanded at an annual rate of 2.6% in the first half of 1998.

Recent data are mixed. September retail sales looked firm, but

growth is slowing (chart). And in manufacturing, the latest Business Conditions Survey shows weaker employment, skimpier unfilled orders, and excessive inventories. In construction, building permits are down from a year ago.

However, a recession is now unlikely, unless U.S. growth slips sharply or commodity prices plunge anew. BOC Governor Gordon Thiessen is betting that so, if slower, U.S. demand will offset weak Asian demand and commodity prices, which are down 15% the past year. The U.S. is the destination of 80% of Canadian exports, and a third of its merchandise exports are commodities. Also, as commodity prices bottom out, the Canadian dollar should strengthen. But most important, lower rates boost the chances of continued growth.

SHOPPERS ARE LOSING THE URGE TO SPLURGE





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A NEW CYBER ORDER

The triumvirate of AOL/Netscape/Sun could become the crossroads of online business in the next century

In the folklore of the computer industry, the tale is told of how IBM foolishly underestimated the young entrepreneur on the other side of the table when it negotiated a licensing deal with William Gates III in 1980. The dweeby programmer, by retaining control of the core software of the revolution, went on to build the most powerful company in the industry.

Then the history of the next era of the high-tech business is told on—about how the era of business came about—a similar story may be told. In this version, Microsoft Corp. is the giant and underestimated rival is

then M. Case, CEO of America Online Inc. The giant's story. Instead of pressing ahead with all its power to unseat Microsoft's online services, as it once intended to do, Microsoft entered into a marriage of convenience. In return for promoting Microsoft's Internet Explorer as AOL's featured Web browser in 1996, Microsoft offered Case an immensely good deal: On the millions of copies of Windows shipped, AOL would be featured online service.

UR-FACE. At the time—when it seemed that Netscape Communications Corp. would run away with the Internet business—it may have seemed a cheap price for Microsoft to get AOL on its side. But in the past two years, AOL has cleaned up its internal problems, bought up No. 2 online service America Online, and boosted its membership to 14 million. That transformed AOL from the No. 1 proprietary online service to Microsoft's most dangerous rival. That became increasingly clear on Nov. 24 when Case announced a \$4.2 billion deal to acquire Netscape—and a far-ranging alliance between them and Sun Microsystems Inc.

By bringing Netscape was impressive enough. But by bringing into the deal, Case has pulled off a stunner that aligns the most powerful players in cyberspace. It plants a stake in the ground, pointing out the direction in which commerce may develop in the 21st Century. Over the next

decade or two, vast chunks of the world economy will move into the electronic realm. What the new triumvirate suggests is that at some point, the online systems that connect companies to consumers, businesses to businesses, and networks to various parts of corporations will become part of a vast digital circulatory system.

The vision: To create a combination of services and products that lets companies do pretty much everything a company does—but on the Web. In the process, businesses could hope to get far more productivity out of the Web than they do now by setting up online stores. Thanks to its new alliance, "AOL becomes a

conduit," says Josh S. Grotstein, a division executive in charge of E-commerce at Citigroup, which has strong relationships with Netscape, Microsoft, and IBM. "It helps communities that exchange information become business communities."

It is ambitious. And it couldn't be a more in-your-face move against Microsoft's Gates, who espouses a similar vision. "When a company with close to half of consumer Internet users embraces E-commerce with such a huge move, this could be the catalyst that could finally make E-commerce take off," says John W. Sidgmore, vice-chairman of MCI WorldCom Inc., the top supplier of Internet "backbone" service. Says Case: "With the success of upstarts like Amazon.com and its impact on book retailing and E*Trade with its impact on stock brokerage, every company has to have a major Internet presence."

How will the new cybertrio make that happen? When the AOL-Netscape merger is complete, probably next spring, AOL will get Netscape's popular Internet browser and a suite of software programs used behind the scenes to run Web sites and conduct business electronically. It will sell those to business customers and, as part of the deal with Sun, the workstation leader will sell the same set of tools to major corporations. Sun

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How the Combination Can Pay Off

The deal comes as electronic business is accelerating at a torrid pace and corporations are scrambling to find the smartest way to rewire all of their operations



AOL

- Through Netscape's Netcenter, AOL expands its audience by 9 million Web surfers—to a total of approximately 23 million.
- Acquires slick portfolio of companies for E-commerce.
- Gains credibility with technology, learns how to satisfy demanding corporate customers.

will pay AOL \$350 million for licensing and other fees over the next three years. In return, AOL will buy \$500 million of Netscape services and equipment. "We believe Netscape software is right down the strike zone," says Case. "Sun's capability to leverage a huge sales force is important. Together, it jump-starts our whole E-commerce strategy."

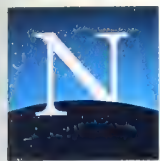
The deal also makes AOL the biggest portal on the Web, the site through which the most people pass as they look for information or buy and sell things. Netcenter, Netscape's Internet site, has 9 million registered users, mostly at work, while AOL has 14 million subscribers—mostly consumers. And when you look at the number of people who visit the Netscape or AOL sites at home, you've got the most powerful force on the Net, with 50% more visitors than its closest rival, Yahoo. "Netcenter gives instant distribution to Corporate America, one of AOL's few weak links," says Kate Delhagen, an analyst at Forrester Research Inc. "Since many American consumers are using the Internet primarily at work, they really need more exposure." AOL already has a toehold in this market through its acquisition last fall of CompuServe Inc., which attracts more business users.

And by corralling consumers and businesses in the same virtual space, AOL has a huge opportunity to pump up the volume of electronic transactions. Crowds Netscape CEO James L. Harris: "This is an awesome combination that lets us explode our vision of the networked economy over the next century."

For AOL and Sun, the timing couldn't be better. The acquisition comes just as consumers, small businesses, and major corporations are grappling with wrenching changes in the way they interact commercially. They are all scrambling to catch

"Netscape software is right down the strike zone," says AOL's Case. Together with Sun's sales force "it jump-starts our whole E-commerce strategy"

CYBER-AMIGOS WILL GAIN



NETSCAPE



SUN

survival for brand name, efforts, and technical team. t of a well-capitalized, well-d team, it will have a better f developing and selling soft-t can stand up to Microsoft's. nter portal gains expertise in g and content creation.

- Gains access to potentially huge consumer market for its Java software.
- With AOL as a lever, the work-station and server giant can launch low-cost "network appliances."
- Bolsters defenses against Microsoft expansion into the large-scale server and E-business markets.

the smartest approach to rewiring for the next century, every facet of business—from procurement, to billing, to an resources, to customer support—will be conducted the Internet.

ne troika is also well-positioned to address another major development in cyberspace—using all sorts of devices other a personal computer to cruise the Net. Using Sun's programming language, Netscape's browser, and AOL's ent, the team can create setups for sending E-mail via cell ie or downloading updated stock data to your TV screen igh a digital set-top box. Sun's Java software will be used OL for future software development while Sun and AOL use Java and the Netscape browser to develop a variety nternet appliances such as handheld PCs, set-top TV box-nd Web phones. Says Robert C. Fox, director of telecom-ications services at Mercer Management Consulting: "A AOL group could be close to the center of that kind of ness."

POTENTIAL PITFALLS

- AOL is paying dearly for Netscape's brand and E-commerce expertise. Nei-ther may justify the dilution of earnings.
- AOL needs to improve customer service. Its new focus on business-to-business E-commerce may divert management.
- AOL could confuse its clientele by splitting its attention among several very different portals.
- Sun's sales and support teams, used to working with corporate clients, may not mesh with AOL's staff.
- AOL's unhip image could drive off Netscape's top techies. Juggling East and West Coast operations is also a challenge.

Sun, which has seen sales of its computers soar because of the Internet boom, now gets a chance to move to the center of the action. Until now, the company hasn't been able to provide all the critical software components that its corporate customers need for electronic business—the way IBM does and Microsoft aims to do.

Now Sun will be able to tap Netscape for software to link Web sites to corporate databases and handle such tasks as managing relations with suppliers over the Web. Says Sun Chief Operating Officer Edward J. Zander: "This certainly puts a different face on Sun."

Microsoft isn't the only company likely to feel the effects of the new coalition (page 32). IBM, for one, loses some of its edge over Sun. What's more, computer makers Compaq Computer Corp. and Hewlett-Packard Co. may find themselves scrambling to bolster their Internet offerings by acquiring software

Cover Story

AOL: THE ART OF MAKING DEALS WORK

The ICQ Web site and its instant messaging software (which stands for "I seek you") took off y word of mouth among the very techno-elite who shun America online Inc. So it's little wonder that then AOL scooped up ICQ's Israeli-ased parent for \$287 million in June, e critics howled. "AOL will turn off ll the talented techies working ere," they whined. "They'll lose the te's following."

Wrong—at least so far. To date, one of the ICQ talent has bolted, and Q has reported growth rather than ecline for the site. Yet with AOL's ost recent partnership with Sun

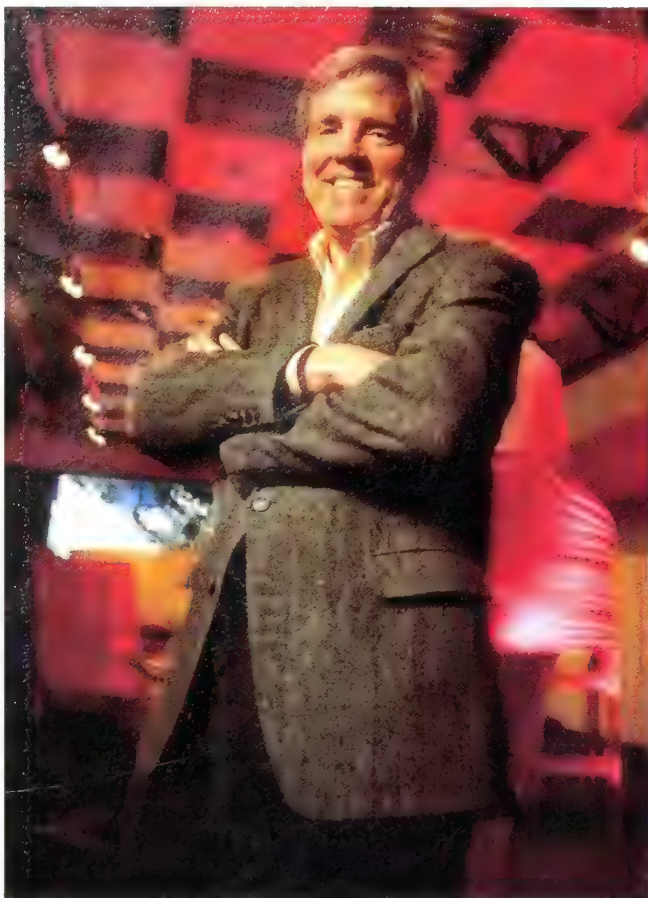
Microsystems Inc. and Netscape Communications Corp., the same questions crop up. These are bigger partners, more used to getting their own way. Will it work?

When it comes to acquisitions, AOL has a plan—and follows it. Borrowing heavily from the world of cable, where each channel is allowed to serve its own niche, AOL has been assembling a portfolio that addresses different audiences. Thus, each unit requires its own flavor of marketing and management styles. The guiding principle: Let acquisitions retain their identities. What this ends up meaning is that subsidiaries keep their own

headquarters. Just as CompuServe Inc., acquired by AOL in February, has remained in Columbus, Ohio, so will Netscape stay based in Mountain View, Calif. And AOL companies frequently employ their own marketing techniques. How else can you explain a parent that can be umbrella to ICQ and the much stodgier CompuServe—and succeed with both?

But AOL is not a total free-for-all. Each unit ultimately reports to an AOL exec. And there are signs of AOL creep: CompuServe's upgraded version is more user-friendly and includes instant messaging à la AOL.

By Catherine Yang in Washington



Symbiotic relationship: Netscape was flagging and looking for a boost. And Sun needed Netscape's software for its corporate customers' online business

NETSCAPE'S BARKSDALE (ABOVE) AND SUN'S McNEALY (RIGHT)

skills or aligning with remaining independent Net players.

Even highfliers like Yahoo! and Amazon.com may have to make accommodations to the new reality. "You have the formation of two very clear axes of power [Microsoft and AOL] on the Internet," says Excite Inc. CEO George Bell.

While the deal may worry rivals, it helps assuage Netscape customers, who have grown wary of the company's ability to deliver on its promises of producing key software. "It's reassuring to us," says Charlotte Decker, a marketing manager with Visteon Automotive Systems, a \$17 billion auto-components division of Ford Motor Co. based in Dearborn, Mich.

Even better—for the prospects of the new trio—Visteon applauds the idea of using AOL to broaden its E-commerce offerings. "Our vision is to be able to service the consumer," says Decker. "If we have car enthusiasts that need parts and they want to order on the Web, AOL would allow us to do that."

To be sure, this is new territory for AOL. Never a technology trailblazer, the consumer giant is now trying to seize the lead. With its successful acquisition of Mirabilis, an Israeli software company, AOL has proved it can fold in a high-tech startup without smothering it (page 29).

The question now is how effectively AOL can manage the

acquisition of Netscape, a much larger software company that is in the midst of developing much more complex "enterprise" ware. "Software is a bad fit for AOL," says Abhishek S. Gami, an analyst at William Blair & Co.

Case is aware of the challenge AOL has to try to keep Netscape's management and technical talent intact. Netscape CEO Barksdale will join AOL's board, assuring continuity of management. The future of Marc L. Barksdale, Netscape's executive vice-president of products and the father of Netscape's browser, is up in the air. Barksdale is on sabbatical and plans to come back Jan. 1. In the meantime, he is in talks with AOL to decide what position would be there.

There's also the nagging possibility that Case's decision to buy Netscape came too late. Once the runaway leader in the market for browser software, Netscape has faltered over the past two years as Microsoft grabbed market share and Netscape management flopped on strategy.

As the company's earnings and prospects slipped this summer, Barksdale began shopping the company around. In October, Netscape was close to consummating a deal with Excite, an Internet portal company.

Excite two months ago. The deal got hung up on several issues, including Excite's reluctance to take on the Netscape software business along with Netscape.

Excite's Bell confirms the talks but says that what broke the deal were tax and accounting issues. Says Bell: "We got three-quarters of the way there, but didn't go all the way."

The AOL-Netscape deal could put Excite and other portal players in a difficult position. Indeed, some investors figure that AOL, which already has a 9% stake in Excite, might buy up the rest. The Netscape deal has already put another leg on the Internet stock bull market. Issues such as Yahoo! and Amazon.com leaped by as much as 20% on one day.

The notion of another AOL deal isn't far-fetched. AOL thrived mainly as a proprietary online service with millions of paying subscribers. But it is facing threats from fast-growing Internet portals such as Yahoo's that are free to anyone with an Internet access service. Those sites now offer news, chat, E-mail, and dozens of connections to content and services—essentially duplicating what Microsoft users get for their monthly fees. Over the next year, major portals such as Infoseek's Go Network, partly owned by Disney, and Microsoft's MSN.com will step up expensive marketing campaigns in their battle for eyeballs. "The door is closing on these portals in terms of how many can get out there and survive," says online consultant Gary H. Arlen of Bethesda, Md.

hat, perhaps, is why AOL is pushing so hard to open a new —onto the bigger world of E-business. And this is where s involvement will be critical. As a partner with AOL and scape, Sun is now in position to challenge IBM, Hewlett-card, and others in developing the systems that will let orations rebuild their businesses in cyberspace. The chal-e for Sun CEO Scott G. McNealy will be to behave like the ier industry leader that this deal may finally make him). And he'll need to make sure that Sun not only talks like od partner but behaves like one, too. In promoting Java as andard, for example, Sun has sometimes come across

as a bit too controlling, say other computer companies. For now, AOL, Netscape, and Sun are basking in the glory of the moment. The three companies are focused on a common goal—E-business. And they have a common enemy—Microsoft. If they can keep it together, this could be the beginning of a new industry legend.

By Ira Sager in New York and Catherine Yang in Washington, with Linda Himmelstein in San Mateo, Neil Gross in New York, and bureau reports

Cover Story

COMMENTARY

By Robert D. Hof

SUN NEEDS A DISPOSITION TO MATCH

What a week for Sun Microsystems Inc. and its CEO, Scott G. McNealy. On Nov. 17, it won the first round in its lawsuit charging Microsoft Corp. with breaching its contract to use Sun's Java software. That put Sun and McNealy firmly back in the driver's seat with the software widely seen as a threat to Microsoft's Windows.

Then, on Nov. 24, Sun became the pinchpin in the deal for America Online Inc. to buy Netscape Communications Corp. Suddenly, years after co-founding Sun as maker of arcane engineering computers, McNealy has emerged as a key direction-setter not only for computer hardware but Internet software and electronic commerce as well.

RASH TALK. Scott McNealy, elder statesman of the Net Economy? It sounds improbable, even the problem facing an otherwise rising man becomes clear. McNealy has always set himself apart from the industry mainstream. He likes to make brash pronouncements about rivals, like calling Windows a "hairball" and dismissing industry consortia as "big fat, no cattle." Today, more than ever, McNealy positions Sun—which designs its own hardware, chips, and software—as the lone holdout against the personal computer duopoly of Microsoft and Intel Corp.

McNealy now has a chance to play a pivotal role in the development of the entire industry—and for that matter, in the development of how other industries use technology. But first, he

needs to lose the isolationism and try a little more diplomacy.

In an industry accustomed to cooperating on setting standards, Sun has an image of being difficult to work with, consistently putting its own development priorities ahead of the needs of its many partners. That could prove a major stumbling block to McNealy's prospective leadership of an effective alliance against Microsoft's hegemony.

Even erstwhile partners such as

Java and cede any improvements to Sun itself. Says Jim Bell, general manager of HP's Embedded Software Operation: "A lot of things they accuse Microsoft of doing, they do themselves." Adds a computer industry CEO: "If anything is going to kill Java, it's Sun's stranglehold."

Alan Baratz, president of Sun's Java software unit, admits Sun helped create a rift with some partners, such as HP, by pricing components too high for the low-cost computer market.

"The consumer markets are new to Sun, and we're learning."

To its credit, there are signs that Sun is taking criticisms to heart. Next month, for instance, it is expected to give licensees a bigger role in guiding Java's evolution. And many of Java's 900,000 developers think Sun is doing just fine. "We do think there is an opportunity to be more flexible," says Baratz.

In the end, the proof is not in what McNealy says but in what he does. As he notes, his outsider stance "certainly didn't keep us from doing a

deal with AOL, even though they're a partner to Microsoft." Indeed, for all his trash talk, McNealy knows how to work on a team. An avid hockey player, he's known on the ice for quick passes to set up others to score. Now, more than ever, it will behoove him to take that attitude from the rink to the boardroom.

Hof covers Sun for BUSINESS WEEK from San Mateo, Calif.



JAVA PAPA: Sun's Baratz is trying to reach out to Sun's licensees

Hewlett-Packard Co. and IBM complain about Java—unhappy with the way Sun meets other companies' needs. They say Sun insists on total control over the direction of Java yet is slow to develop crucial technologies to make it a broad alternative to Windows. For instance, while Sun is now part of the International Standards Organization's industry standards-setting process, it still insists that licensees hew to its own definition of

JUSTICE STILL HAS A CASE

AOL-Netscape doesn't kill its argument



Microsoft wasted no time pouncing on the news. Just hours after the morning papers reported that America Online was negotiating to buy Netscape, Microsoft General Counsel William Neukom gathered reporters on the front steps of the E. Barrett Prettyman federal courthouse in Washington, D.C. The merger, he declared, proves that the antitrust case against his company was unnecessary. "The proposed deal demonstrates a simple truth: There is

vigorous competition in the marketplace, and Microsoft faces resourceful and capable competitors," said Neukom, who suggested that the government should simply drop its case. "From a legal standpoint, this proposed deal pulls the rug out from under the government."

Nice try. Sure, a merger between America Online and Netscape—plus an alliance between them and Sun Microsystems—does, as Neukom points out, give Microsoft a potent new competitor. But it is far from the legal landmine for the trustbusters that Neukom suggests. "This certainly doesn't help Justice's case, but it doesn't kill it either," says New York antitrust attorney Stephen M. Axxin.

LIGHTER REMEDIES? News of the deal helps Microsoft Corp.'s legal team in two ways. First, it casts doubt on one of the trustbusters' key claims: that the software giant's aggressive tactics can succeed in killing off competitive threats, such as those posed by Netscape Communications Corp.'s Internet browser and Sun Microsystems Inc.'s Java programming language. By improving the prospects for both of those products, the deal could allow Judge Thomas Penfield Jackson "to draw the inference that the market effect" of the company's allegedly predatory actions has been less damaging than the government claims, says George

Mason University School of Law antitrust professor Ernest Gellhorn. That, in turn, will make it harder for Justice to prove that Microsoft broke the law.

Second, in the event of a government victory in the antitrust suit, Jackson may find that serious restrictions on Microsoft's future business practices are not necessary. By illustrating that Microsoft's competitors are able to band together, the deal diminishes the urgency of judicial intervention in the marketplace and "suggests that there is a self-correcting process at work that may outstrip the court's ability

to implement a cure," says William Kovacic, a visiting professor of antitrust law at George Washington University School of Law. Adds Neukom: "This is exactly the type of area where judges should tread lightly."

Nonetheless, Microsoft is hardly in the clear. In his testimony on Nov. 23, economist Frederick R. Warren-Boulton, the government's expert witness, argued that Netscape's decision to sell out to America Online Inc. actually demonstrates how badly Microsoft's tactics weakened the onetime Internet browser leader. He told the court that Netscape, once the most promising startup in the U.S., now had little choice but to merge. "It's an unfortunate outcome of what Microsoft has been doing," said Warren-Boulton.

"STRONG INDICATION." Justice's lead prosecutor, David Boies, also sees fresh proof of Microsoft's market power in the deal. AOL CEO Steve Case has said he still wants to remain in his arrangement with Microsoft that gives AOL a preferred position on Windows' opening screen—even if that means continuing to make Microsoft's Internet Explorer AOL's preferred browser, rather than Navigator, the competing product made by its putative subsidiary, Netscape. That, Boies, is "a strong indication" of Microsoft's continuing leverage.



MICROSOFT'S NEUKOM: A valiant attempt to win a late-in-the-day dismissal

While the deal may undermine the arguments for extreme remedies—such as a Microsoft breakup—it does little to credit the basic need for the types of steps that Judge Jackson is most likely to seek. For example, many of Microsoft's competitors would like restrictions on the company's ability to strike exclusive contracts with business partners. Microsoft is able to force partners to agree to these deals, rivals say, because of the monopoly of its desktop operating system—a fact of life that's unlikely to be changed by the AOL-Netscape combination.

So how will things ultimately turn out? Kovacic predicts that if the government prevails, Jackson will ultimately place limits on Microsoft's exclusive deals but that they may be "less intrusive ones" than he would have established with the AOL-Netscape deal. That's good news for Bill Neukom Co.—and no doubt a welcome relief after weeks of sitting through government witnesses and awkward videotaped testimony from Chairman William H. Gates III. But Microsoft is by no means out of the woods.

By Mike France, with Paula Dwyer, in Washington, D.C.

Cover Story

COMMENTARY

By John Carey

BIG TOBACCO MAKES A STINKY BEDFELLOW

No sooner had the attorneys general of eight states inked their historic deal with Big Tobacco than antismoking activists were pleading with other fence-sitting states: Don't sign it. Smoking foes argued that the \$206 billion settlement was riddled with loopholes.

No such luck. By Nov. 20, just one week after the deal was announced, the 46 states that hadn't already settled with tobacco signed—to meet a deadline pushed by the industry. "It's hard to say that getting \$7 billion over 25 years isn't in the long-term interests of Massachusetts citizens," says George K. Weber, chief of tobacco litigation for the state.

He's right—if the goal is fattening state coffers. The governors can't wait to collect so they can enact popular tax cuts or education programs. Says University of Florida law professor Lars Noah: "This was the state AGs deciding to get as much as they can while the industry was still interested in making a deal."

On the other hand, if the goal is to reduce smoking and tobacco-related health-care costs, then it's not very successful. For example, Big Tobacco agrees not "to take any action the primary purpose of which is to initiate, maintain, or increase the incidence of youth smoking." But kids will still be able to get tobacco-branded clothes and gear from coupons in cigarette packs—and a survey in



NICOTINE-STAINED: State attorneys general work on their side of the story

sumers how the industry manipulates public opinion—even though studies have shown that's the most effective antismoking message for kids. When it comes to public health, the deal "is a complete sham," concludes cardiology professor and antismoking activist Stanton A. Glantz of the University of California, San Francisco.

The deal also closes off key lines of attack for antismoking litigators. Suppose a city wants to sue tobacco to recover the costs of smoking-related illnesses, much as the city of Chicago is now doing in suing gun

taxes. That means every dollar collected by new federal taxes would mean a dollar less for the states, and a 35¢ per pack tax hike would leave the states with nothing.

State lawyers say higher cigarette prices are a good thing, period. "Our true goal is reducing smoking. We are willing to give away state dollars to do that," says one AG aide. But imagine what will happen if Congress decides to raise cigarette taxes. Suddenly, 46 governors would risk losing much or all of the tobacco money they'd expected. The deal gives them a strong incentive to lobby against the move. No wonder Wall Street has bid up shares of Philip Morris Cos. and RJR Nabisco Inc. by 9.8% and 12.4%, respectively, since details of the deal began to surface Nov. 9.

This may be the best settlement anyone could have struck with the industry. And it's less frightening than the one proposed in June, 1997, which would have given companies immunity from private suits. Still, state AGs should have learned from the story of Dr. Faustus: Some deals are better not made at all.

 The states may have fattened their coffers, but they'll have to do tobacco's bidding to keep them that way

Massachusetts showed that kids with such merchandise were three times as likely to smoke. Large billboards advertising smoking are banned. But companies can coat neighborhoods with smaller signs.

Or consider the \$1.45 billion to fund a national foundation to reduce smoking. Under the agreement, the money can't be used to tell con-

manufacturers. The deal precludes such local suits—even though no city is party to the deal.

The deal's worst flaw, however, is that the money puts the states squarely into bed with industry. Big Tobacco added a provision that shrinks the payout to states if companies' market share drops or the federal government hikes cigarette

Carey covers the tobacco wars from Washington.



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WASHINGTON

CAN TOM DELAY MEND FENCES?

A corporate critic is the new House business liaison

Sure, Bob Livingston is about to become Speaker of the House. But for business, the man to watch in Washington may be Majority Whip Tom DeLay (R-Tex.).

A pugnacious, hard-line conservative who enjoys good relations with Republican colleagues and the Religious Right, DeLay went unchallenged for reelection to the No. 3 House GOP post. More important, he helped Livingston lock up the votes to become Speaker. As a reward, DeLay talked Livingston into giving him an added role: liaison to the business community.

The prospect of dealing with DeLay, who has often criticized business for fainthearted support of GOP causes, has some lobbyists rocking in their Gucci loafers. Formerly the head of an exterminating company, DeLay has close ties to small-business interests. But he has been sharply critical of Big Business and its lobbyists in Washington.

DeLay couldn't be reached for comment. But he has charged that corporate leaders don't put enough oomph—from manpower to money—behind Republican crusades for tax cuts and regulatory reform. And he's upset with trade associations and lobbying firms for hiring too many Democrats.

HERO STATUS. Friction between Big Business and the GOP leadership, which is more comfortable with Rotarians than the country-club set, is nothing new. But outgoing House GOP Conference Chair John A. Boehner (R-Ohio), who has been the liaison with K Street lobbyists, voiced his complaints quietly and in private. DeLay, by contrast, is known as "the Hammer" on Capitol Hill. He led the impeachment charge against President Clinton, repeatedly calling on him to resign. Business reps fear that strong-arm tactics aimed at bludgeoning them into submission could become a hallmark of DeLay's reign. Sighs one disheartened lobbyist: "This isn't going to be pretty."

Sources familiar with DeLay's thinking say he thinks that with the Republican's slim six-seat edge, closer coordination with business groups is vital to push through the GOP's 1999 legislative agenda—details of which have yet to

emerge. "It will be easier to win votes if he can mobilize the grass roots of the business community," says John Feehery, a Republican strategist and former DeLay aide.

DeLay will insist that companies and trade groups get more directly involved in urging lawmakers to back pro-business bills. "If you go to him and say: 'We really need this,' you're going to be expected to turn out your troops, not just send a letter from your CEO," says a lobbyist close to the Texan. Meanwhile, DeLay will keep the pressure on K Street to hire more Republicans and fatten GOP political war chests—a campaign that corporate reps think amounts to meddling in their internal affairs. Sniffs one: "DeLay can't say: 'Don't hire Democrats,' and still expect us to go out and round up Democratic votes."

DeLay has his fans in business circles. His free-market views and opposition to regulatory enforcement have earned him hero status among small-business owners. The son of an oil-drilling contractor, DeLay led the struggle to deregulate the energy sector. That fizzled last year but could be revived in the next Congress. "Tom's philosophy of downsizing government and relying heavily on the market system is what many of us support, too," says Kenneth L. Lay, chairman and CEO of Houston energy giant Enron Corp.



Called "the Hammer," DeLay has lobbyists rocking in their Guccis over his possible strong-arm tactics

HOUSE MAJORITY WHIP DELAY: FEISTY BUT POPULAR

Still, DeLay's fervor rankles with some corporate lobbyists. His 1995 campaign to weaken environmental protections with spending-bill riders "was overkill," says one business rep. "It probably set back the cause of regulatory reform for years." After the GOP losses in 1996, DeLay backed off some extreme stances. But moderation isn't his nature. That has business lobbyists bracing for whip-lash.

By Amy Borrus in Washington

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COMMENTARY

By William C. Symonds

HARTFORD'S 'HAIL MARY' PASS

It's one for the record books. To lure the New England Patriots to Hartford, Connecticut Governor John G. Rowland helped organize the most lavish package of incentives yet for a big-league ball team. Not only did the governor agree to pick up the entire \$350 million tab for building a new stadium and infrastructure for the site where Interstates 84 and 91 meet in depressed downtown Hartford. He also pledged \$15 million for a "state-of-the-art practice facility" and more than \$100 million to maintain the stadium over the 30-year lease.

Rowland, a Republican, even guaranteed the sale of club seats and luxury boxes, which could cost taxpayers up to \$17.5 million a year. In short, the Pats' deal is "the most egregious example yet of corporate welfare for a sports team," says Mark Rosentraub, a sports-business expert at Indiana University.

So why did Rowland do it? "This is the 800-pound gorilla... that will bring Hartford into the next century," Rowland exults. Adds Hartford Mayor Mike Peters: "This is the biggest thing that's happened here in 40 years." True, the 68,000-seat stadium is the cornerstone of a \$1.2 billion redevelopment project, and Patriots owner Robert Kraft did pledge \$75 million to build a convention hotel and an NFL entertainment pavilion. But he will own both facilities and profit from them.

"BUDGET HOLE." And it's no secret that the former home of Mark Twain and J.P. Morgan has seen better days. Its insurance industry has shrunk, and defense-related jobs have vanished. Its schools are in such bad shape that the state took over. And after Connecticut refused to build a new arena, the Hartford Whalers

hockey team, the city's sole major league team, left town last year. "We're hungry," says Rowland, who argues there was nothing else that could provide anywhere near the same "turbo-boost to this community."

But the cost is breathtaking. Connecticut already has "some of the highest debt levels in the nation," says Standard & Poor's analyst Arthur Dial. Now, it must add at least \$350 million in general-obligation bonds. While Connecticut can draw from a 10% tax on Pats' tickets, taxes on the player salaries, and other assorted levies, those won't be enough to cover the full cost—at least in the first years. "I can almost guarantee that a big budget hole will be created, requiring additional taxes or cuts in services," predicts Smith College economist Andrew Zimbalist.

Rowland says he's confident all 125 luxury boxes and 6,000 club seats will be sold, meaning the guarantee "will never be exercised." But given Hartford's relatively small corporate community, the Pats will have to draw heavily from Boston, 100 miles away.

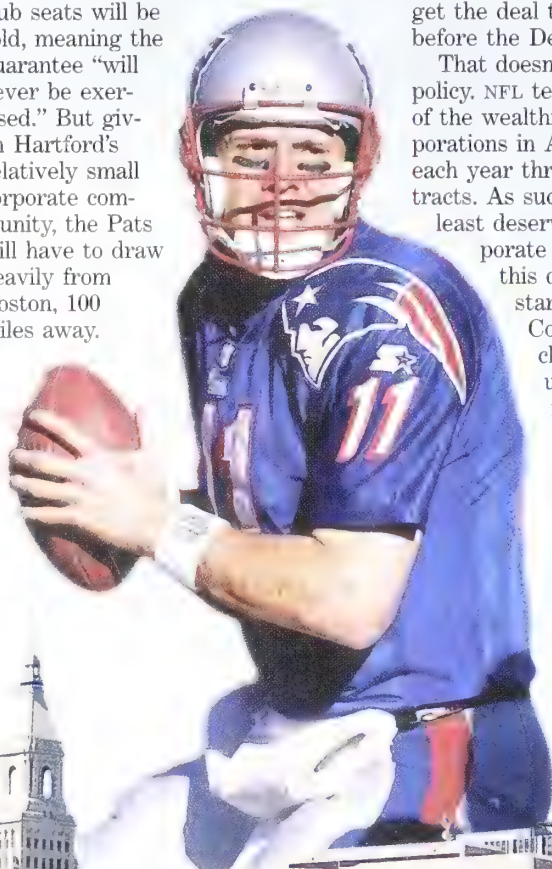
"That could be a tough sell," warns Rosentraub. "And the sale of premium seating could get more difficult" if the economy weakens, or if the Pats play poorly, adds Larry Moulter, CEO of Woolf Associates, which helped build Boston's Fleet Center, home of the Celtics and Bruins.

POOR POLICY. Those risks might be worth it if the Pats would truly revive Hartford. The stadium will transform a now derelict area adjacent to downtown. But 20 years of research indicates that recruiting a pro team at most produces "a very modest economic impact," says Rosentraub, certainly "nothing like" the vision being painted.

Hartford is hardly alone. St. Louis, Baltimore, and Nashville have lured teams with deals nearly as bad. So Rowland may be right when he says this is the best he could do. And the public seems charged up enough to get the deal through the legislature before the Dec. 31 deadline.

That doesn't make it good public policy. NFL teams are owned by some of the wealthiest individuals and corporations in America, and earn more each year through broadcasting contracts. As such, they are among the least deserving candidates for corporate welfare. The winner in this deal is owner Kraft, who started negotiating with Connecticut after Massachusetts refused to cough up even \$72 million for a new stadium. But until the system changes or cities open their eyes, this is one game where the owners are likely to win every time.

Symonds watches sports business for BUSINESS WEEK from Boston.



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MEDIA

WANT TO OWN A PIECE OF THE YANKEES?

The team could be part of an IPO if Cablevision snags it

By the time Cablevision Systems Corp. is finished, it may be selling everything New Yorkers need to amuse themselves—from cable-TV service and TV sets to sporting events, movies, and Broadway shows. Its latest addition? The company wants to add the fabled New York Yankees to a roster of sports teams that already includes the New York Knickerbockers and New York Rangers.

The impetus to scoop up the World Series champs is not just a love of the game. Cablevision's 12-year broadcast rights deal for the ball club ends in 2000. And to keep the Yanks in the fold—at a reasonable price—Cablevision is expected to pay team owner George Steinbrenner as much as \$600 million for a majority stake in the team. Cablevision and Steinbrenner declined comment for this story.

But there's more to this deal than keeping Cablevision subscribers glued to their sets. The next step for Cablevision is to spin off the subsidiary that would own the sports teams in an initial public offering, one source close to the company says. That entity, Rainbow Media Holdings Inc., is 75% owned by Cablevision and 25% by NBC, and already has a slew of media properties including Madison Square Garden, the Knicks and Rangers, Radio City Music Hall, and several entertainment channels, including Bravo and American Movie Classics.

PRICEY PROGRAMS. Adding the Yankees to that rich content collection could make an IPO very attractive, says analyst Gary A. Farber at S.G. Cowen Securities Corp. Even without the Yanks, he values Rainbow at \$3.6 billion. "If they do the Yankee deal, they should do an IPO," says Farber. "If anything's been



Steinbrenner is angling to keep running the club—and possibly the Knicks and Rangers as well

THAT CHAMPIONSHIP SEASON: WINNING THE '98 SERIES

proven out in the cable and broadcast sector, it's the high price of programming. Investors know that this is an extremely valuable commodity."

Still, Cablevision's hard-charging controlling shareholder Charles F. Dolan must satisfy Yankee boss George Steinbrenner first. Steinbrenner has been angling to continue running the baseball club and possibly the Rangers and Knicks as well—a prospect that may not sit well with the Cablevision execs already in charge. In the end, Cablevision may decide to acquire only a mi-

nority stake giving it rights to acquire control down the road and snag broadcast rights. "I think there will be a deal, but I think that it's going to take time for everything to work through," says a source familiar with the negotiations. **BROADWAY BABY.** The Yankees, however, are but one piece of Cablevision's foray into New York's hot entertainment market. The company recently

announced deals to buy movie theaters, and a Hollywood source says Cablevision execs want to look at the New York assets of Livent Inc., the Canadian-based theatrical-production company that has filed for bankruptcy protection. The company has already dipped its toe into live theater, backing the Broadway production of *The Scarlet Pimpernel*. And it has become a top retailer of consumer electronics through its purchase of the Nobody Beats a Wiz chain. Soon, a shop for a TV set at a Wiz outlet could be offered a deal on a digital set-top box and channels, or a package of discounted tickets to sports events, movies, and Broadway.

But in the eat-or-be-eaten media jungle, Cablevision's expanding menu of properties could turn it into a target. With its 3.4 million cable subscribers, ample programming assets, and strong position in the New York media and entertainment market, Cablevision would appeal to a larger media empire. Merrill Lynch & Co. analyst Jessica Reif Cohen says Rainbow alone is an "obvious target" for Liberty Media Corp., the programming arm of Tele-

communications Inc. Liberty and Rainbow are already partners with Fox Entertainment Group Inc. in regional sports programming, and Liberty will be in with \$5 billion in cash once the acquisition of TCI by AT&T closes.

Then there's TCI itself, which already has a 36% nonvoting stake in Cablevision. So far, Dolan has shown far more interest in buying than selling. But even if he buys the Yanks, the game is only be in the early innings.

By Richard S. Tedlow
in New York

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COMEBACKS

MIKE OVITZ JUST WANTS TO ENTERTAIN YOU

His plans include football, theme parks, and interactive games

For months, potential investors in a new Los Angeles football team have made their way to the gated home of former Hollywood talent agent Michael Ovitz. But these days, the owner isn't home. While aides show off glossy drawings of the \$350 million stadium Ovitz hopes to build for the National Football League franchise he aims to attract, Ovitz is out doing deals.

The man once called the King of Hollywood is plotting his comeback. In months of tireless dealmaking,

Ovitz has strung together a series of investments that may produce a new empire that will focus largely on "out-of-home" entertainment, which will include everything from interactive video arcades in malls to sports teams to Broadway production companies. Simultaneously, the onetime chairman of Creative Artists Agency (CAA) is building a new talent-management business. Ovitz' plan is to take stakes in movies and TV shows created by a stable of writers, producers, and stars he would manage, and also to create spin-offs, such as video games or even Broadway shows, that would lure consumers to his entertainment outlets.

COUNTERSUITS. The away-from-home entertainment plan is not exactly a new idea. In fact, it's essentially the same strategy that Ovitz' former boss and onetime friend, Disney Chairman Michael D. Eisner, has been pitching for years. Disney has already branched out to become a major player on Broadway—as a theater owner, producer of live stage shows, and owner of two sports franchises.

Ovitz' plans for the Great White Way have dimmed a bit already. On Nov. 18, Livent Inc., the theatrical-production company in which he invested \$20 million for control, filed for bankruptcy protec-



OVITZ: *The Livent fiasco has some questioning his business acumen*

tion. Livent founder Garth H. Drabinsky is suing Ovitz, charging he conspired to oust him, while Livent is suing Drabinsky, alleging fraud. The episode has raised questions about Ovitz' business acumen.

Scrambling to save the company—and Ovitz' plans to use it—Livent is shopping for outside investors to provide funds for touring companies of such Livent shows as *Ragtime* and *Showboat*. One possibility is concert promoter SFX Entertainment Inc., whose chairman, Robert F. X. Siller-

man, already invests in touring productions. SFX refused comment.

Along with Ohio-based land developer Herbert Glimcher, Ovitz is building a 1.5 million-square-foot mall in Port Elizabeth, N.J. Ovitz' main contribution: a 150,000-square-foot entertainment complex with interactive sports games, a wide-screen movie theater, and other entertainment. He plans to team up

with architect David Rockwell and Larry and Jim Loeks, who ran Sony Co. theater chain, to build similar complexes in shopping malls around the country.

But Ovitz also wants writers, producers, and stars to create the content that can use to lure consumers to his theaters and other entertainment venues. To that end, he's launching a firm to manage the careers of up-and-coming actors, hotshot directors, and sports stars. He has signed up a dozen agents, and executives in Hollywood expect Ovitz to try to sign former CAA clients, such as directors Sydney Pollack and Francis Coppola. He has already recruited talent managers Rick Yorn and his sister-in-law, Julie Silverman Yorn, whose clients include Matt Dillon and Ed Burns. His plan is to let the actors and directors get a piece of the movies or television shows they create. Ovitz plans to invest in the productions and eventually make games or theme-park rides out of them.

Meanwhile, Ovitz is laying on a glam to land that football team. In October, he presented his plan to a special NFL owners meeting in Kansas City, Mo. Ovitz' pitch was pure Hollywood: a 12-minute videotape including one of the female stars of *Baywatch*. He intends to call his Mission-style stadium The Hacienda, with a bell tower that rings with each touchdown. Next door, a shopping mall will be decorated with logos from the 31 NFL teams and have its own NFL interactive pavilion. "Very, very impressive," says NFL Commissioner Paul Tagliabue of the show. "It's Hollywood." Indeed it was. But that, of course, is Michael Ovitz' stock in trade.

By Ronald Grover in Los Angeles and Joseph Weber in Toronto, with Richard Siklos in New York

Mr. Showbiz?

BROADWAY SHOWS

Invested \$20 million and controls a 27.8% stake in theater-production company Livent, now in bankruptcy

PROFESSIONAL FOOTBALL

Is managing partner in a group seeking a National Football League franchise and authority to build a \$350 million stadium alongside a shopping mall in Carson, Calif.

SHOPPING MALLS

Has a minority interest, with Glimcher Realty Trust, in a development company for entertainment-themed shopping malls in Port Elizabeth, N.J., and Columbus, Ohio

ENTERTAINMENT CENTERS

Has a one-third interest, with David Rockwell and Barry and Jim Loeks, to build interactive and themed entertainment centers

TALENT MANAGEMENT COMPANY

Has recruited Hollywood talent managers and literary agents to form a firm to represent actors, writers, directors, and sports stars



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THE INTERNET

THE MEAT AND POTATOES OF ONLINE SHOPPING?

Not yet—but food cyber-retailers are still trying to get it right

As the skyrocketing prices of E-commerce stocks such as Amazon.com attest, the concept of shopping on the Internet is catching on, big time. Millions of consumers now routinely order books, videos, airline tickets—you name it—over the Net to avoid a trip to the mall. They're buying everything, it seems—except groceries.

That's not for a lack of companies trying to get folks to order groceries via their PCs. More than a dozen companies have gone after what seems like a great opportunity: helping the busy computer-owning families that make up the most profitable slice of the \$400 billion grocery industry skip a trip to the store. But so far, the business is, well, small potatoes: close to \$200 million a year, making it the laggard of E-commerce.

FATAL FLAW. Now, the industry is going through a shakeout. The hottest company of a year ago, New York-based NetGrocer Inc.—which had deals with America Online Inc. and Yahoo! Inc. plus backing from Cendant Corp.—has fired its CEO and laid off more than half of its staff. The problem: NetGrocer modeled itself after Amazon, setting up a national shipping center and mailing dry goods across the country. That's expensive. It also left consumers wanting for eggs and butter. That, says Maria LaTour Kadison, an analyst in Forrester Research Inc.'s online retail division, is the biggest obstacle: "You still have to go to the grocery store."

OnCart, based in Lombard, Ill., learned a similar lesson and shut down in March.

Still, the opportunity is so large that companies are working overtime to figure out ways to make online groceries a success. Forrester predicts that Internet food and beverage sales will increase

fiftyfold—to \$10 billion—in the next five years, while sales of many other items such as books will only quintuple.

So investment continues. In October, Nordstrom Inc. paid \$23 million for a minority share of Streamline Inc., a Westwood (Mass.) company that fills orders for dry goods, videos, and other items over the Internet. Says Nordstrom Co-President J. Daniel Nordstrom: "Customers might like to take care of the new dress shirt as well as the groceries." Whole Foods Market Inc., the health-food chain based in Austin, Tex., plans a Web-based store for next March. And during the week of Dec. 7, Peapod Inc., the largest online grocer will set up a warehouse on Long Island from which it will deliver groceries across the New York area.

Peapod's move could start to turn the tide, analysts say. By moving to warehouses and abandoning its original

tactic of sending green-aproned employees to pick items off supermarket shelves, it will boost efficiency and lower its prices. Its existing seven markets will gradually shift to the new model. Since the start of November, shares of the Skokie (Ill.) company have jumped 55%, to 6. Peapod revenues doubled, to \$60 million, last year, though analysts predict it won't show a profit until 2001.

Still, Peapod faces some big hurdles. Since it will continue to buy the goods from its already established retail partners—not wholesalers—it may miss out on the best prices for its consumers. Rivals ShopLink and Streamline, in contrast, have deals with wholesalers.

The online activity has piqued the interest of the retail grocery giants, which could provide intense competition, the way that Barnes & Noble Inc. now is challenging Amazon in books. Royal Ahold, the Dutch parent of Giant and Stop &



BEWARE THE BIG FISH

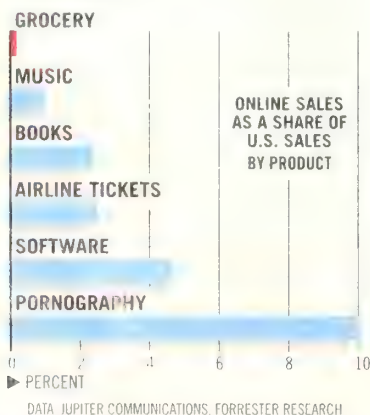
"If you ever prove it works, Wal-Mart's going to come in and blow you out of the water," says Whole Foods' Mackey.

Shop, is experimenting with online groceries in the U.S. and Europe and thinks online sales could represent as much as 5% and 10% of its total—or as much as \$4 billion—in five years. "I see a big future for this," says Ahold Executive Vice-President Hans Goba.

For now, Ahold is one of the most aggressive real-store players online. But that could change fast. "If you ever prove it works," says Whole Foods CEO John Mackey, "Wal-Mart's going to come in and blow you out of the water." Maybe. But if there's an axiom on the Net, it's that there's room for upstarts.

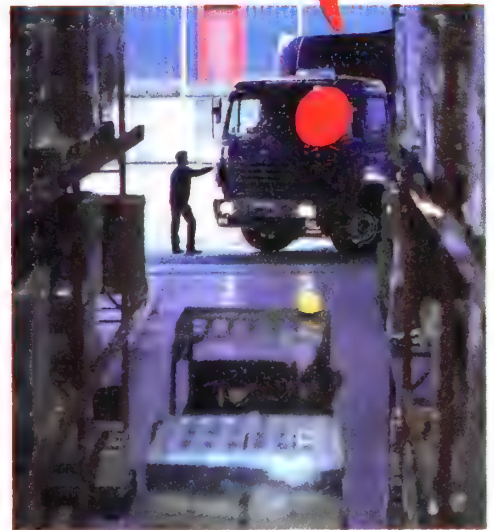
By David Leonhardt in Chicago, with bureau reports

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In Business This Week

EDITED BY KELLEY HOLLAND

GRIST FOR PAPER'S MERGER MILL

THE PAPER-PRODUCTS INDUSTRY continues to contract. On Nov. 24, International Paper, at \$20 billion the largest paper-products company in the world, announced it was buying competitor Union Camp for \$6.6 billion. The deal comes just two months after Union Camp announced a restructuring to cope with the effects of the Asian crisis. Because fewer U.S. products are being wrapped and packaged and sent to Asia, the industry is in a funk. But IP Chief Executive John Dillon says the deal isn't about tightening capacity. "This is about putting two very strong companies together and making them

better," he told analysts. Meanwhile, Smurfit-Stone Container, which was created by a megamerger earlier this year and is shouldering \$6.5 billion in debt, is cutting back. It announced on Nov. 24 that it would lay off 3,600 workers, idling facilities that produce 1.1 million tons of paper products and taking a one-time charge of up to \$350 million.

EXPECT LAWYERS TO TIE UP MCI'S LINES

HERE COME THE SUITS. ON the heels of a Nov. 10 ruling by the Federal Communications Commission that MCI Communications overcharged some of its customers, attorneys are scrambling to file class actions. The FCC determined that MCI had unfairly charged some customers "nonsubscriber" rates of 38¢ a minute plus a \$2.49 connection fee. The practice may have affected millions of customers. On Nov. 20, two class actions were filed. An MCI spokesman says the company is proposing changes in its rates to satisfy the FCC.

FEDEX STOPS DELIVERY ON A UNION

UNIONIZING FEDERAL Express' 140,000 workers has long been the dream of labor organizers. That now seems more unlikely than ever. The Memphis-based express-delivery giant—one of the few nearly union-free shops among major transportation companies—is likely to remain that way. With FedEx founder Fred Smith threatening to outsource hundreds of their jobs, the company's 3,500 unionized pilots on Nov. 20 scrubbed a Dec. 3 strike vote. Analysts say the about-face by the pilots dashes any hopes of organizing FedEx' other employees.

HEADLINER: OPRAH WINFREY

WHAT WOMEN REALLY WANT?

Oprah Winfrey is investing with some big names in TV in a new cable channel targeted at women. Joining Winfrey and her Harpo Entertainment Group are Geraldine Laybourne, ex-president of Nickelodeon and founder of Oxygen Media, plus Roseanne producers Marcy Carsey, Tom Werner, and Caryn Mandabach. Other backers include America Online and ABC.

Winfrey, who will help create new programming, wouldn't comment. But with her name, the team can "build our brand immediately," says Laybourne. "There is no source who knows

what women want and need more than Oprah." Telecommunications Inc. will carry the channel to 7 million subscribers. Laybourne aims for 20 million by launch. Have people overdosed on Oprah lately? Her movie, *Beloved*, did poorly at the box office, and her talk-show ratings are down from last spring. "I think Oprah should be the brains, not the face [behind Oxygen]," says consultant Simon Williams. Laybourne vows to avoid overexposure: "We will be very protective of the natural resource" known as Oprah.

By Rick Melton



CLOSING BELL

STILL SINGLE

Lehman Brothers is a lot like a confirmed bachelor—plenty of marriage rumors, but the venerable investment bank never makes it to the altar. Still, nuptial rumors keep moving the stock: On Nov. 23, Lehman's stock rose 8 1/2%, to \$54.50. In the wake of the Bankers Trust-Deutsche Bank deal, investors think Lehman could sell. But Steven Eisman, a financial services analyst at CIBC Oppenheimer, says that's unlikely: Management is against it, and the most likely buyer, Deutsche, is gone.



NOV 16 NOV 23 98
DATA FROM COMPTON FINANCIAL MARKETS

PULLING THE PLUG ON A PEARSON DEAL

IN A MOVE THAT COULD HURT its credibility in Europe, investment firm Hicks, Muse, Tate & Furst on Nov. 23 abandoned its plan to buy the business and professional-publishing divisions of Simon & Schuster from Pearson. The units are part of Pearson's \$4.6 billion acquisition of Simon & Schuster's educational-publishing business. Hicks Muse claimed profits at the divisions fell short of projections, and Pearson would not renegotiate the \$860 million price. Pearson is believed to be considering a suit against Hicks Muse.

A DRUG TO MAKE MERCK EUPHORIC

ON NOV. 23, MERCK FILED ITS application with the Food & Drug Administration to mar-

ket Vioxx, part of a new class of painkillers. The move came a month earlier than expected. Approval could come as early as May, says Deutsche Bank Securities analyst Anniola Haggard. Haggard figures Vioxx could generate sales of \$1 billion by 2002 in the market for pain relievers. But Merck probably won't first to market with this breed of painkiller: Monsanto has already filed an application for a similar drug, which may be approved in January.

ET CETERA...

- J.C. Penney is buying Genovese Drug for \$492 million in stock and debt.
- Novell reported earnings of \$102 million, a loss of \$78 million in 1998.
- Disability insurers United and Provident are merging in a \$5.2 billion deal.
- Pfizer's Viagra labels carry warnings against use in patients with heart problems.



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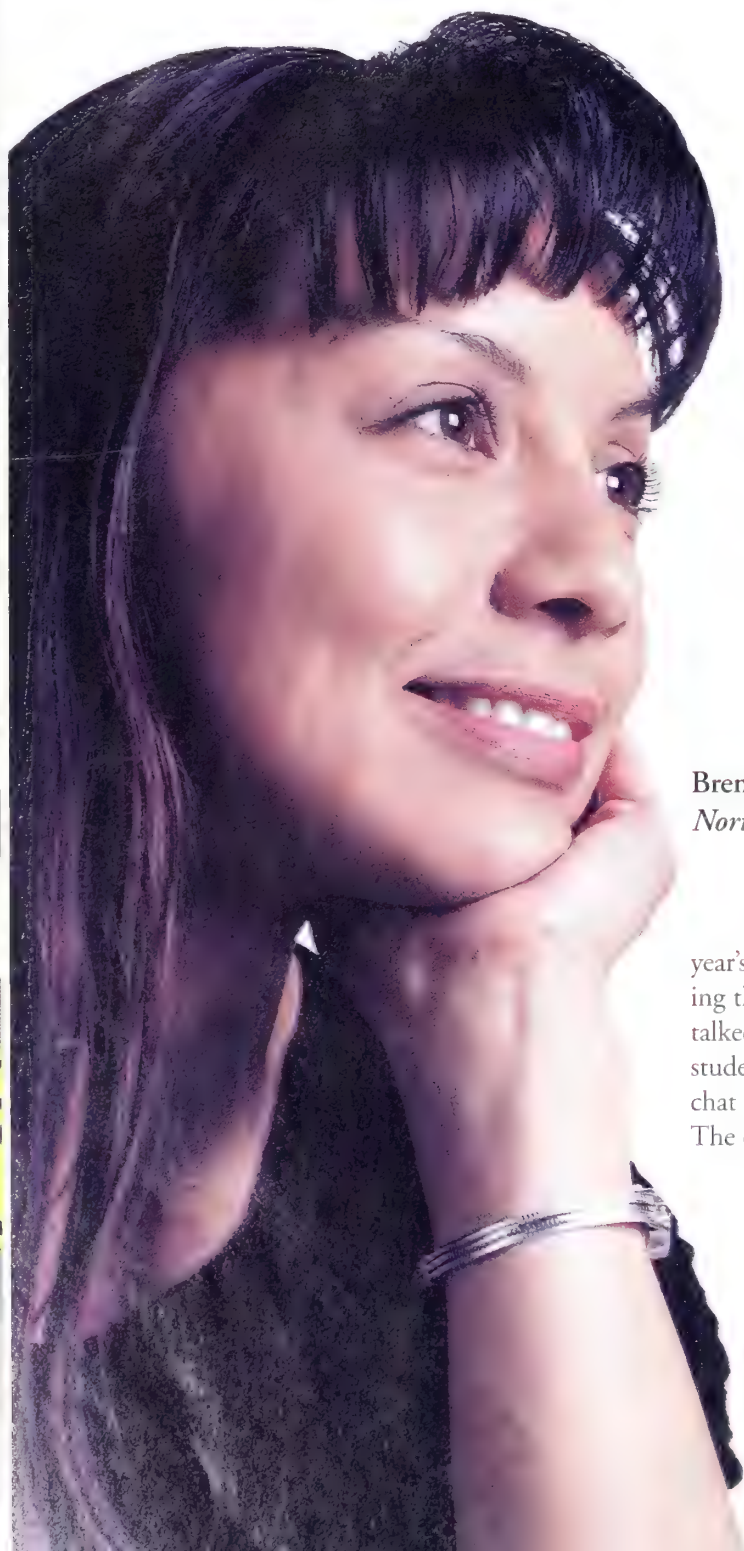
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Who's ins

Brenda Van Keuren
Northern Arizona University

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EDITED BY OWEN ULLMANN

HEAR THE BANKS HOWLING? THE S&Ls ARE BACK

They're back. Written off for dead after sinking in a swamp of bad loans and corruption a decade ago, savings and loans are gaining in numbers and strength. Regulators are pondering 56 applications from insurers, securities dealers, manufacturers, and even retailers wanting to operate savings banks. And that could complicate Congress' dogged efforts to overhaul the nation's banking laws.

Why does everybody suddenly want to run an S&L? Until Congress enacts reform—a struggle now into its third decade—a thrift charter is the only way for companies that aren't commercial banks to get into full-service banking. A thrift can be owned by any type of company and can do almost everything a bank can, short of serving big corporate customers and actively trading bonds. But it faces less regulation.

If some congressional leaders had their way, new banking legislation would wipe out the industry. But with such influential players as State Farm Insurance, Ford, and Nordstrom signing up to run S&Ls, "the thrift industry is building an increasingly powerful lobby to keep its charter alive," says Bert Ely, a banking consultant in Alexandria, Va. That could encourage Congress to try tearing down barriers between the insurance, banking, and brokerage businesses—the sort of market-driven reforms championed by Senator Phil Gramm (R-Tex.), the Senate Banking Committee's new chairman.

Bankers argue that they're hobbled in competing against the new thrifts. Banks and their holding companies are regulated separately, and both must meet minimum capital requirements set by the Federal Reserve. While thrifts now face tougher capital rules than their 1980s ancestors, owners don't have to maintain that extra capital base and are scrutinized only by the Treasury Dept.'s Office of Thrift Supervision—perhaps the least feared regulator in Washington.

The new applicants "are building a parallel banking system with looser rules," gripes Edward L. Yingling of the American Bankers Assn. The Fed also frets about what Governor Laurence H. Meyer calls "a relentless search for loopholes" to evade stricter regulation.

Bankers are most riled by State Farm Financial Services, launched in November by the big auto and homeowner insurer. The new thrift will open only one office, at State Farm's Bloomington (Ill.) headquarters, depending on its agents to sell certificates of deposit, mortgages, auto loans, and lines of credit.

PILING IN. While State Farm is starting out in just two markets—central Illinois and St. Louis—bankers have visions of a nationwide network of 16,000 agents. And it is just one of 30 insurers vying to open thrifts. Brokers like PaineWebber Inc. and A.G. Edwards Inc. are also piling in, though most just want the power to serve as trustees for customers without having to comply with 50 different state laws.

The new thrifts aren't likely to recreate the threat to the financial system that the '80s savings and loans posed. Most will focus on originating loans that they'll quickly sell to investors—cutting the odds that they'll be caught with bad assets when real estate prices fall.

And few plan to get into the commercial real estate development that dragged down the old S&L industry.

Even so, the specter of the S&L cleanup and its \$150 billion taxpayer tab will hang over next year's banking-reform debate. House Banking Committee Chairman James A. Leach (R-Iowa), who tried in 1998 to wipe out S&Ls, will pick up the fight to block nonfinancial companies from owning new thrifts. Gramm is more inclined to tear down barriers and let institutions duke it out. The thrifts, which not so long ago were counted out, could put up a pretty good fight.

By Mike McNamara



GRAMM: Market-driven

CAPITAL WRAPUP

AL GORE, BULLET DODGER

► It's turning into a jolly holiday season for Vice-President Al Gore. On Nov. 24, Attorney General Janet Reno declined to name an independent counsel to probe questionable 1996 fundraising practices by the Veep. Reno still has until Dec. 7 to decide whether to name a prosecutor to probe soft-money solicitations by the Clinton-Gore campaign. But the public seems weary of the impeachment saga and related Clinton scandals.

Then there's the economy. Several months ago, Gore feared an Asia-in-

duced slump could undermine his Presidential bid. But with the stock market roaring back and consumer confidence up after four months of declines, what's to worry about?

Prospects also have brightened on the political front. Gore's archrival, House Minority Leader Richard A. Gephardt (D-Mo.), may forgo a White House run to focus on recapturing the House in 2000. Meanwhile, the decision of California and several Mountain States to move their Presidential primaries up



THE VEEP:
All smiles

to March has produced a compressed primary calendar that favors well-funded front runners.

Gore isn't home free, of course. The economy could still tank. He trails Texas Governor George W. Bush in early polls. And the Veep seems unable to shake his reputation as a wooden campaigner. But all in all, Gore is entering '99 in a lot better shape than his rivals thought—with sugar-plum dreams of an uncontested primary romp dancing before his eyes.

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RIVALRIES

OFFICEMAX: A DISTANT THIRD

With sales and profits way under par, investors are itchy

Just a year ago, OfficeMax Inc. was the scrappy up-and-comer in a tightly competitive discount office-supply market. Founded 10 years ago with \$3 million in venture capital from local doctors and lawyers, the suburban Cleveland company had grown exponentially into a \$3.7 billion business. By mid-1997, OfficeMax was gearing up to compete as No. 2 with the looming merger of its larger rivals, Staples Inc. and Office Depot Inc.

When that merger fell apart in the wake of a Federal Trade Commission suit, it seemed OfficeMax had dodged a bullet. But try telling that to investors. They've grown impatient waiting for management to figure out how to crank up profits at its rapidly expanding roster of new stores—150 of them last year, 120 more in 1998. Since the beginning of this year, Wall Street has knocked OfficeMax's stock price down 24% while driving Staples' up 95% and Office Depot's up 35%.

THINNER MARGINS. Why the gloom? This is, after all, a company that is expected to see both sales and operating income grow by 17% this year, to \$4.4 billion and \$170.8 million, says BT Alex. Brown Inc. analyst Christopher E. Vroom. While

that may be good in many industries, it still lags considerably behind the performance of rivals. Staples' sales are expected to grow by 38%, to \$7.2 billion, and operating profits by 49%, to \$404.8 million, Vroom says. Office Depot's sales should jump 34%, to \$9 billion, and profits 71%, to \$518 million. OfficeMax "is definitely a third-tier name," says Shayne M. John, an analyst for NCM Capital Management Group Inc. in Durham, N.C., which holds about 143,000 shares. "The only reason we own it is because it is cheap."

OfficeMax executives declined to be interviewed by BUSINESS WEEK. But a closer look reveals that while OfficeMax has maintained a frenetic pace of new-store openings, it has not squeezed nearly as much out of each store as have the other chains. Sales per square foot are \$220, vs. \$347 for Office Depot and \$471 for Staples. One reason is that on average, OfficeMax stores are younger,

EXPANDING: OfficeMax opened 150 new stores last year and 120 in '98.

and younger stores are less productive. But the older stores aren't doing any better: Same-store sales grew a mere 2% in the third period, vs. 5% for Office Depot and 12% for Staples.

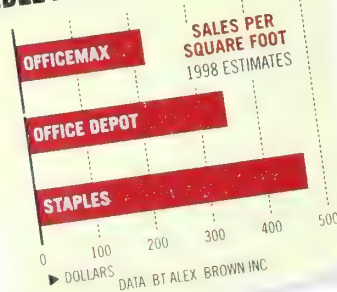
Indeed, immaturity explains only part of the problem. OfficeMax also is struggling with less efficient supply and inventory systems that limit its ability to rapidly cut costs or shift its product mix. That became painfully clear in the past year, as sub-\$1,000 personal computers took the market by storm. OfficeMax drew a bigger portion of revenues from computer sales—13% a year ago, vs. 7% at Staples and 9% at Office Depot, says Donald T. Spindell, an analyst at A.G. Edwards. So the new thinner margins hit it harder.

But experts say the real difference was that the other two office-supply chains were quicker to adjust as the market shifted to the cheap personal computers. To keep profits up, Staples pushed sales of printers and copiers (up 62%). Office Depot cut the number of items it had to track—by eliminating its desktop computers, for instance, and dropping Packard Bell NEC and other products and services, including printer leasing.

Hewlett-Packard and Compaq Computer gear OfficeMax, meanwhile, was caught flat-footed. Only recently has it, too, chopped the number of its PC suppliers.

Investors and analysts say the

IDLE AISLES AT OFFICEMAX



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In Business, It's

ABILITY NOT DISABILITY THAT COUNTS

Returning Employees with Disabilities to Work: Cut Costs, Change Attitudes

Each morning, your routine is the same. Wake, shower, eat breakfast, walk or drive to work, and tackle the dozens of tasks awaiting you at your job. But imagine one morning not being able to do any of this. Imagine that because of a unexpected injury or illness, temporary or long term, not even being able to get out of bed.

For hundreds of thousands of employees each year, life-changing disabilities are a very real fact of life. A recent U.S. government report found that the average American between the ages of 35 and 65 runs a 30 percent risk of suffering a disability of 90 days or longer.

But employees aren't the only ones who suffer: the impact on the employer can be considerable. Indeed, a report by the Washington Business Group on Health found that lost employee time due to disability costs employers as much as 10 percent of company payrolls. The costs stem not just from the obvious ongoing payroll expenses and

insurance premium increases, but the less

obvious – but often more important – loss to the organization of the employee's knowledge, experience and training.

Consider two scenarios. Two employees with the same job description work at different companies and suffer the same injury. Both workers receive acute medical care. Both wish to return to work as soon as possible. Both seek help from their employer.

Employee A works for a company with a return-to-work program. She receives prompt medical attention and follows a defined treatment protocol developed by an integrated support team including physicians, her case manager, and other caregivers. If all goes well, she'll be back at work in about two weeks, perhaps on light duty at first, then back at 100 percent.

Employee B, however, works for a company that, like the majority of U.S. employers, has not instituted a return-to-work program, and so she is treated quite differently. She receives a disability package and is sent home, left to struggle with her own medical care. Perhaps she'll get a follow-up call in three months asking when she plans to return to work. She has had no counseling, no case management, no support.

The result: the first company successfully returns an employee to work, while the second needlessly leaves a valuable worker to fall through the cracks of the system – perhaps permanently.



Debra Krotenberg is back to work at the law firm of Zirkle and Hoffman.

Fortunately, the cost of returning an employee to work need not be expensive. In fact, one national retailer found the average direct cost for work site accommodations to be \$30. The same company calculated that the cost of replacing an employee ranged from \$1,800 to \$2,400.

Companies that institute return-to-work programs encourage a culture in which employees are valued for their contributions and are not considered disposable. The companies also send an important message that people with disabilities are productive members of the workforce and society. When a company successfully returns an employee with a disability to work, attitudinal barriers collapse, opening doors and minds to hiring people with disabilities.

For the sake of all employees, with and without disabilities, it's time to start opening some doors. Who knows who will be the next to come through? Perhaps even you.



Mark Chilutti is back to playing an active role in society.



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snafu also points up a lack of depth in OfficeMax' executive ranks. Control is still concentrated to a large degree in the hands of Michael Feuer, the intense, charismatic chairman, CEO, and co-founder. That is a vestige of the chain's entrepreneurial roots. In 1988, Feuer, then an exec at a fabric-store chain, and a partner came up with the idea to start an office-supply chain offering discounts of up to 70% to small and home businesses. He became famous for his microscopic attention to detail. After a 12-hour day at the office, he used to slip into a pair of blue jeans and go to a store and observe, incognito. If a customer didn't buy anything, Feuer would follow him or her to the parking lot and demand to know what the store was doing wrong.

"TOO BIG." Within five years, Feuer had built OfficeMax up to 300 stores and \$1 billion in sales. The frantic growth continued after Kmart Corp. bought the company in 1991 and spun it off three years later with more than \$1 billion in cash. But now Feuer has 793 outlets, and management hasn't kept pace. "This company has gotten too big" to operate under the old structure, says NCM Capital Management's John. "The management strength is very lackluster."

Scrambling, OfficeMax is finally taking some steps in the right direction. It has hired 20 new senior managers in the past two years, including Thomas M. Piteo, vice-president for store planning, brought in from Best Buy Co. OfficeMax is moving to drum up new revenue sources by remodeling stores to offer more document-copying and furniture sales. A prototype smaller store, named "PDQ," is being developed to arrange goods for quick shopping. New software should better manage inventory starting early next year.

Those are hopeful signs, and investors have rewarded the company by driving the stock up from 7 in mid-October to almost 11 today. But the shares also got a boost from takeover talk, after OfficeMax said on Sept. 14 that it had had discussions with an unnamed party. The talks ended, OfficeMax said, because it was unclear "whether the proposed transaction could be consummated." Some analysts and investors still hold out hope that a buyer will emerge. "They are likely to remain in the No. 3 spot unless someone takes them over," says Vroom of BT Alex. Brown. For as fast as it grows, OfficeMax only seems to fall further behind in the race.

By Peter Galuszka in Cleveland

HOW STAPLES IS TAKING THE RIGHT TACK



STEMBERG: *By fixating on details, he found an edge*

A casual observer can't see much difference between a Staples store and an OfficeMax store. After all, both chains sell nearly identical office supplies, ranging from paper clips to copiers. And only the most penny-pinching consumer would notice significant price differences.

But there are good reasons why Staples Inc.'s stock price has nearly doubled this year, from just under 19 to about 36, while OfficeMax Inc. shares have tanked. And, why its same-store sales have outpaced those of its rivals for 17 straight quarters. In the office-supply business, doing little things well can make a big difference. And that's where Staples excels. Says ABN Amro retail analyst Mark D. Mandel: "Staples just executes better."

Indeed, in the year since its planned merger with Office Depot Inc. floundered, Staples has lost none of the edge that made it the industry growth leader. If anything, it has barreled ahead even faster by broadening out its strategy and moving quickly to find other ways to feed the growth engine. To bolster sales to small business, for example, Staples bought up two companies that sell directly to entrepreneurs. European expansion was also accelerated—35 new stores are planned for Britain and Germany next year. Worldwide, the chain will add 170

stores in 1998, to 913 total.

But to see how Staples beats OfficeMax on per-store sales and profits, consider its approach to the computer market. While OfficeMax made low-cost PCs a cornerstone of its strategy, Staples focused on high-margin peripherals such as printers, fax machines, and cartridges. The chain based in Westbor-

ough, Mass., also set up "tech centers" for such minor PC-service jobs as adding memory. The centers generate less than \$1,000 of revenues a week per store, but customers who use them often load up.

Staples also has a big advantage in handling inventory. The company uses a just-in-time system in which vendors ship to central warehouses, and Staples in turn trucks product to stores as needed. OfficeMax, by contrast, has its 100-plus vendors ship directly to stores, which each maintain large inventories.

NO FUDGE FACTOR. The approaches have strikingly different results. Staples and OfficeMax both had slightly more than \$1 billion of inventory at the end of the third quarter, but Staples is selling products at a rate of \$7.2 billion in 1998, vs. \$4.4 billion for OfficeMax. Staples is "much more disciplined about managing inventory [and] controlling precisely what goes on shelves," says Eileen M. Leary, an analyst at State Street Research & Management Co. in Boston, owner of 3 million Staples shares.

For two companies selling essentially the same products, that makes all the difference. "We follow what Sam Walton always preached—retail is details," says Thomas G. Stemberg, Staples' chairman and chief executive. It's a religion that's serving shareholders well.

By Geoffrey Smith in Boston



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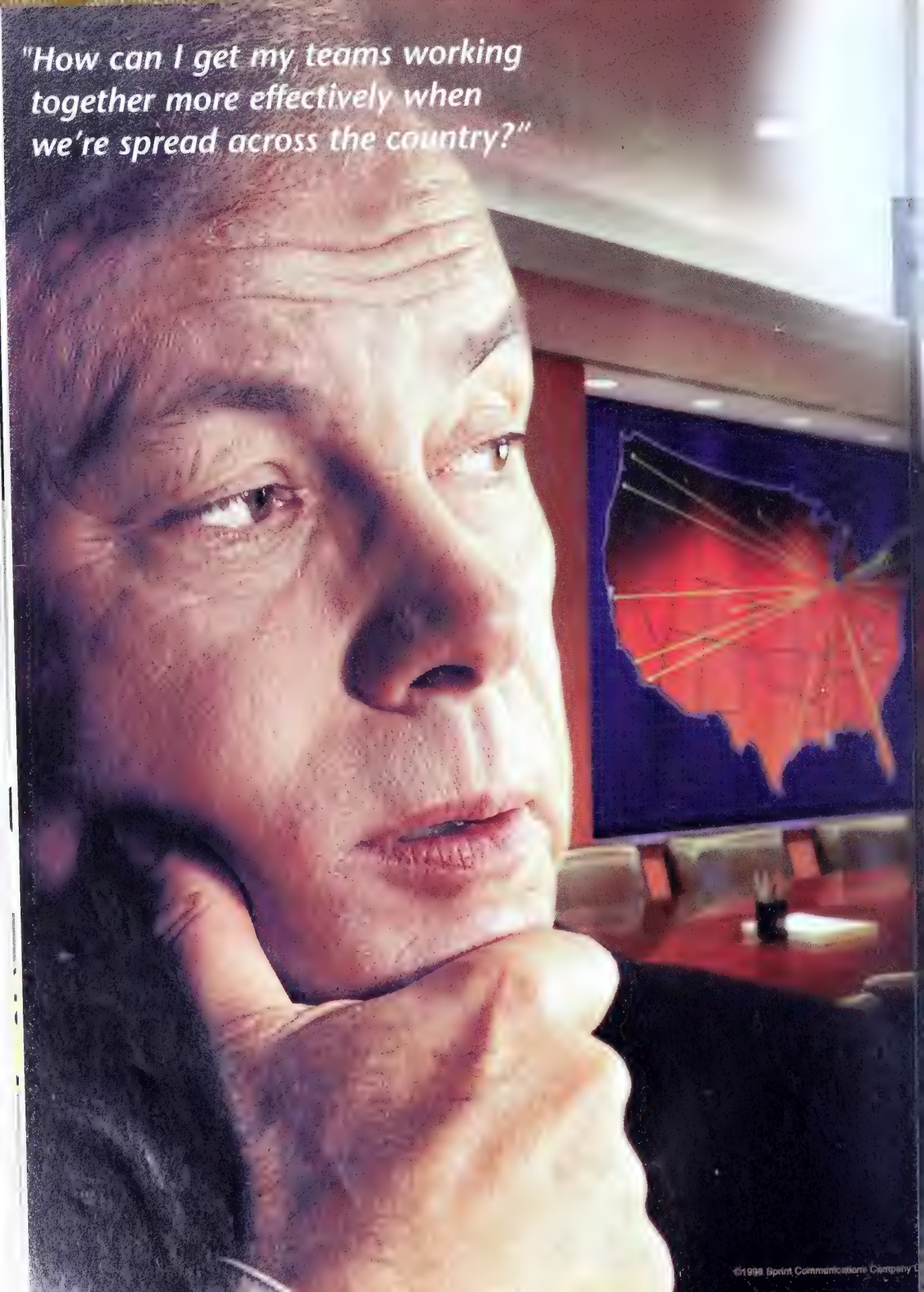
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A SLIPPERY SLOPE FOR NORTH FACE

Going mainstream could alienate its core customers

James Fifield is doing his best to look the part. Dressed in a fleece vest, the 56-year-old chief executive of outdoor-gear maker North Face Inc. props his feet on his desk in his temporary headquarters, a circle of trailers in rural Colorado. But peeking through his outdoorsy veneer is a silver bracelet watch and funky French eyeglasses—hints of the fast lane the former CEO of EMI Music drove out of when he took over North Face five months ago. "It was a chance to make my avocation my vocation, to work for the company which makes the clothes I live in on the weekends," says the Colorado native of his return from New York.

For the man who helped sell America's teens on the Spice Girls, North Face is one more exercise in mass marketing. The beat that now drives Fifield: broadening the appeal of North Face's high-performance outdoor clothes to mainstream America. In recent years, the brand has caught on with the Range Rover yuppie set and fashionable urban kids. The question is whether Fifield can capitalize on the shift without alienating the outdoor retailers and rugged hobbyists on whom North Face has

long depended. "They have the potential to be the dominant high-end equipment and apparel brand, but there is a risk of diluting their franchise," warns Morgan Stanley Dean Witter analyst David Griffith.

Potential, yes—but can Fifield and North Face live up to it? Despite seemingly strong growth—Griffith expects sales to increase 23% this year, to \$256 million, while net earnings before charges should grow 27%, to \$14.1 million—Wall Street is worried. Since Fifield took over, the stock has skidded from 26 to 9%, before recovering recently to 13. Erratic

cash flow due to seasonality and mounting receivables made the stock a short-seller pick; investors also question Fifield's costly decisions to move the company headquarters and to expand into footwear with the \$10 million purchase of boot maker La Sportiva. "That made some investors nervous," says Robert P. Fetch, a partner at Lord, Abnett & Co., one of North Face's largest investors. He believes the moves will pay off.

Still, few would dispute the strategy: the outdoor look is hot. And North Face is moving from the \$5 billion specialty out-

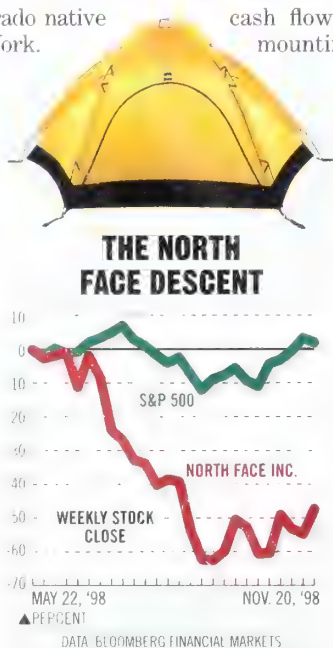
FIFIELD: A stock slide took almost a million out of the new CEO's pocket

door market to the broader \$30 billion casual sportswear market. "There's a big change in lifestyle toward outdoor leisure, and we are perfectly positioned," says Fifield.

But he also has plenty of problems to overcome. Brought into and out of bankruptcy in the early 1990s by Fifield's predecessor, William Simon, North Face's stock has been erratic. Fifield joined the board in 1996, and after a year was passed over for the top job at EMI. Simon grabbed him. "To have a guy like this come into this parochial, inbred industry is a remarkable opportunity," says Simon.

Today, Fifield is North Face's largest shareholder, and despite an almost 50% million decline on his initial \$15 million holding, he hasn't become cautious. Within months of taking over, he announced a radical relocation from San Francisco to Carbondale, Colo., a half-hour from his Aspen home. The CEO says the move puts employees into the environment they're designing for, but it cost \$6 million. And the company had to replace half its U.S. workers.

Even more controversial is Fifield's plan to grow the number of stores seen by North Face after 2001—from 1,500 specialty stores up to 4,000 retailers, including some it would never have taken to a few years back, such as Nordstrom and Foot Locker. For most consumer products, that would be good news. For North Face, it's a double-edged



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sword. Though sales will increase, particularly among the inner-city kids who have made its down parkas into a trend, the specialty stores that stock North Face are increasingly upset.

The reason: They fear that willy-nilly expansion will undercut the brand. Popular Mountain Light jackets, normally \$345 a pop, have started showing up at low-cost outlets for as little as \$230. The specialty retailers also complain of arrogant moves like North Face's opening company-owned outlets without much notice. "If they pollute the brand, we'll cut back on it," says John Mead, president of Adventure-16, a San Diego-based chain of outdoor stores. Already, A-16 is stocking more competing brands.

Some friction with retailers, Fifield

says, is inevitable. "Retailers love to see the status quo," he says. Moreover, analysts attribute North Face's high receivables to the favorable payment terms it has given many small retailers in a drive to boost sales. They say the problem will improve as more sales come from bigger chains. And so far, North Face's core consumers appear to be on his side. Janine Silberman, a Los Angeles-based climber who is planning a trip to Kilimanjaro, says North Face remains her favorite. "As long as I'm getting safety and warmth, and the colors are easy to see, I'll buy it," she says.

Still, to keep the restive retailers on board, Fifield intends to tighten inventory controls so products can't be diverted to discounters like Costco Wholesale; in-

ventory and delivery systems are being upgraded. Fifield also insists he will carefully differentiate between retailers. Lower-price goods with fewer features will go to the mass-retailing chains. High-tents, Himalayan climbing suits, and other serious equipment will go exclusively to the specialty retailers.

The activewear business is littered with companies, such as Fila Holding, that have lost their faithful by trying to expand too quickly. Can Fifield do better? He confidently predicts sales will double in three years and margins will grow from 10% to 14%. "I was hired to take North Face to the next level," he says. So far, it's been a tricky climb.

*By Kathleen Monahan
in Carbondale, Co.*

PATAGONIA STICKS TO ITS KNITTING

Patagonia. People love it or hate it. To some, it's "Patagucci," a high-priced, overexposed brand for the surfing and mountaineering set. To others, particularly those who embrace the company's devotion to protecting the environment, Patagonia is the outfitter of choice. "I would pay more to buy something from Patagonia," says Rick Gulley, 52, a climber and insurance executive in San Diego. "It's my experience with their clothing, but as important is the style of the company."

That style is a commitment to high-quality, no-frills outdoor goods, created with respect for the environment. And unlike rival North Face Inc., privately held Patagonia is not reaching out to the masses. It's sticking to its knitting—a loyalty the Ventura (Calif.) outfitter learned when it grew too fast in the 1980s.

CACHET. With sales galloping along at a 30% annual growth rate, an expansion-minded Patagonia moved away from its outdoor enthusiasts. Products for which it was known—*anoraks* for subzero temperatures, say, or four weights of polyester underwear—gave way to casual wear designed for Middle America. By 1990, revenues topped \$100 million,



BUYING ROPE A fresh stress on environmentalism appeals to the outfitter's tradi- tional clientele

but the brand was losing cachet.

Worse, when sales started to flatten, expenses didn't. In 1991, the company hit the wall. Facing a massive cash shortfall, its bankers demanded a reorganization

that forced Patagonia to lay off one-fifth of its workforce. "It was the wake-up call," says Edward M. Schmults, a former Patagonia chief operating officer who is now president of rival Moonshine Mountaineering, owned by clothing maker Esprit.

For Patagonia, it was back to the basics. Refocusing on its core "technical" clothing that stresses function over fashion, the company dropped retailers and reduced its product offerings. It also launched an ambitious program to redesign its products to

minimize the effect on the environment of making or using them.

To be sure, the company had always been environment-conscious. Founder and co-owner Yvon Chouinard was an early proponent of "clean climbing"—scaling rock walls without leaving behind any paraphernalia. Since 1985, he had been levying a 1% "earth tax" on sales—more than Patagonia spends on advertising—and devoting it to green causes.

But in a sobering essay in Patagonia's 1991 spring catalog, Chouinard took the company to task for the harmful materials at the heart of its high-performance gear. That led to the 1993 introduction of fleece shirts made of recycled plastic soda bottles and in 1996, to using only organic cotton. The moves have clearly paid off: Sales and profits have grown steadily ever since, says Schmults. This year, sales should top \$170 million. "I have a great deal of respect for Patagonia's ideals, and that makes me more passionate about selling it," says Christine Miller, who owns Sportago, an outdoor clothing store in St. Helena, Calif. With testimonials like that, Patagonia can afford to ignore fashion, discount stores, and its detractors.

*By Larry Armstrong
in Los Angeles*

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RETAIL

PADDLING HARDER AT L. L. BEAN

Can the catalog outfitter catch up with the times?

Terri Wise grew up with the catalog from L. L. Bean Inc. as a staple in her house. Her parents regularly called Bean to order clothes and Christmas gifts. But these days, the only tie the 24-year-old Wise has to the Maine outfitter are some wool socks and flannel pajamas. She doesn't even bother to get the catalog. "Their stuff is just so traditional," she says. "It doesn't seem very Nineties."

That's an understatement. In everything from management to fashion, privately held Bean in Freeport, Me., is a company firmly stuck in the past. Although Bean racked up double-digit rev-

enue growth as it rode trends such as the outdoor-sports craze of the '70s and the preppy look of the '80s, it failed to follow suit in the '90s. Today, the average customer is pushing 50. The styling of its khakis, parkas, and sweaters has changed little, and the Bean Boot, the company's very first product, is still one of its best-sellers. "Bean fell into the trap of becoming enamored with its own status while the rest of the world moved forward," says Kurt Barnard, president of *Barnard's Retail Trend Report*.

Indeed, even though strong international sales early in the decade helped mask the problems at home, Bean's

numbers in recent years have been little to write home about. Despite having what many see as the strongest brand franchise in the catalog industry, sales are foundering. After dropping in 1996, revenues grew a scant 2.9%, to \$1.1 billion, in 1997. Analysts say the company, which doesn't divulge its earnings, will see a similar sales performance in 1998.

WIDE GAP. The slowdown appears to have shaken the outfitter out of its conservatism. Bean President Leonard Gorman, the grandson of L. L. himself, vows he'll "dramatically change L. L. Bean as we know it." Initiatives ranging from opening stores to updating its clothing to branching into women's fashion catalog are planned. The goal: add \$300 million in sales by 2000 and triple pretax profits. Outsiders, however, wonder if Bean's efforts will be a little, too late. "It used to be that Bean was the only player on the block," says Glenda Shasho Jones, president of Shasho Jones Direct, a full-service catalog agency. Now, "they're playing catch-up to their competitors. And it's a wide gap to close. For years, Bean, led by Gorman since 1990, has prided itself on shunning the practices of an increasingly cutthroat mail order industry. It was the last major catalog to start charging for shipping, holding out until 1994. At headquarters, company lore revolves not around financial success or marketing coups but around tales such as the Christmas 1996, when an incoming shipment of toboggans arrived late at the Maine warehouse. In its anything-for-the-customer tradition, Bean ordered a Federal Express Corp. 747 jet up to Freeport, flew it top-to-bottom with toboggans, and flew around the country making drop-offs at FedEx hubs. "It was a fairly hefty expense," says Lou Zamboni, Bean's senior vice-president, "but I wanted the kids to have the sleds for Christmas."

But while Gorman stayed true to his principles, the competition moved in. The overall number of catalogs mailed each year in the U.S. has jumped from 7.8 billion in 1982 to 13.9 billion currently. "Where the arrival of the Bean catalog used to be a big event," sighs Gorman, is now "just one of a dozen or so" in the mailbox. More competition came from traditional retailers such as Gap Inc. and Recreational Equipment Inc. (REI), who have copied and updated the casual outdoorsy look once owned by Bean.

Yet even as his core business eroded, Gorman hesitated in expanding the brand. For example, he debated

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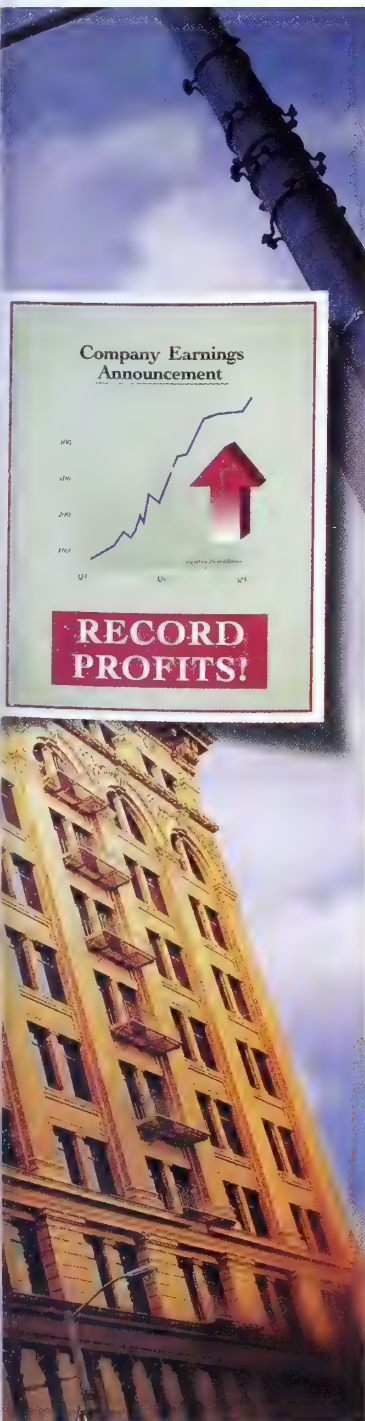


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ears with his managers the merits of moving into children's clothing, while rivals such as GapKids sewed up the market. In retail outlets, competitors such as REI grew rapidly, while Gorman held Bean's presence to its giant store in Freeport—because he felt catalog sales were strong enough. "We discussed the growth we might achieve by opening up more stores," says one former Bean executive. Certainly, such a move would by no means have been risk-free: Mail-order companies such as J. Crew Inc. have demonstrated that the leap from catalogs to stores is not always smooth. Still, industry watchers say he goofed. "He was fool to pass this up," says catalog consultant William Dean.

MAKE-UP. Nowadays, Gorman is trying to make up for lost time. Plans are to add one 100,000-square-foot superstore in the mid-Atlantic region—exact location yet unnamed—plus several smaller satellite shops nearby. If those are successful, a national rollout is in the drawing boards. Freeport Studio, new casual-clothing catalog aimed at boomer women—offering dresses, skirts,

and jewelry—will be launched next year, as will a full fashion update of Bean's regular line. And he'll double marketing spending, to \$26 million, next year to make sure shoppers know that

bad word." Concedes Gorman: "Profit has not been a cultural value."

Will Gorman's fixes be enough? Despite legitimate strengths—its service and state-of-the-art warehouse continue to set the industry standard—most of Gorman's moves will simply allow Bean to catch up to rivals rather than surpass them.

And skeptics warn that Bean will have a tough time coming up with fashion upgrades bold enough to distinguish itself from such competitors as J. Crew and Lands' End Inc. Wendy Liebmann, president of consultants WSL Marketing, warns that there are now "110 people offering khakis and oxford-cloth shirts."

After years of hesitation, Gorman is fighting a rear-guard action to reclaim Bean's relevance. This time, he won't have decades to figure it out.

*By William C. Symonds
in Freeport, Me.*

L.L. BEAN'S FRESH SPURT

OPEN STORES Will add a 100,000-sq.-ft. superstore on the East Coast, along with several smaller satellite stores.

BOOST ADVERTISING A new TV advertising campaign—Bean's biggest ever—started in November. Fresh print ads will appear next spring.

GET INTO FASHION In January, will launch Freeport Studio, a catalog aimed at boomer women, featuring dressier clothes.

changes are taking place.

Changes are also under way back at headquarters. Gorman is breaking up his hierarchical management in favor of business units responsible for such areas as sporting goods. Most important, he's telling managers that "the 'P' word [profit] is not a



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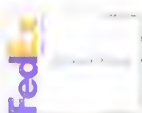


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Special Report

ENTERPRISE

Timely Insights for Small Business

In Box page 2

Brief Cases How small biz promotes itself, spam-busting service, welfare hires, and more



Social Issues page 4

CPA Idealism Businesses with a social conscience don't have to look like losers on the bottom line

Companies page 8

Cybersermons Rabbi Bernhard

Presler's Torah-Fax offers full-service support to overstressed clergy

Marketing page 10

Hearth Throb Homespun mail-order retailer Gooseberry Patch turns customers into friends



Technology page 12

Intranet News Now, anyone can build a companywide Web-style network—affordably

Roundtable page 18

Fund-Raising Fitness Entrepreneur Whitney Johns on improving women's access to capital



Management page 22

Bennies from Heaven Customized compensation allows small outfits to attract and hang on to top hires

International page 26

Courier Can-Do Pony Express has a reputation in Russia for finding cheap, fast, and clever solutions to local delivery problems

My Company page 28

Management Kevin Kelly learned you can make someone a supervisor, but that doesn't make them a leader

Under 30 page 30

Whoa! Seasoned rodeo rider Casey Collier, at 17, has already lassoed a market in Western clothing



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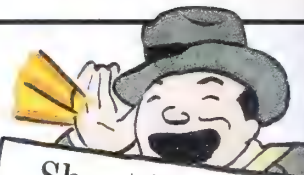
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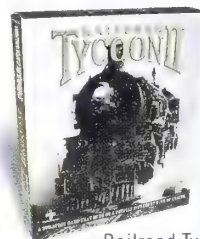
SPAM BUSTER

Spam-spam-spam-spam. It clogs servers; it wastes time. A new "opt-out" service, called SAFEeps, aims to help E-mail users escape unsolicited commercial E-mail, while letting them get promos they might want.

Here's how it works: You register your E-mail address (or an entire domain) at www.safeeps.com and tell it to accept spam on up to 21 topics, or block it all. There's no charge.

Marketers then pay SAFEeps \$29.95 to run up to 300,000 E-mail addresses through its system, removing people who have opted out of receiving spam.

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Home is where the business is for nearly half (49%) of entrepreneurs with annual sales of \$50,000 to \$500,000, according to a survey of 930 companies by PSI Global. Additional findings show there's less difference between home-based firms and companies with regular offices than is commonly assumed. They differ most in the owner's attitude toward growth.



"I have two bottom lines to my activities: Am I making money, and am I solving social problems?"

—Tim Joukowski, co-founder of Aqua-Future Inc., an eco-friendly fish farm in Turners Falls, Mass. (page 4)

NEARLY 70% OF SMALL-BIZ OWNERS PLAN NO NEW HIRES NEXT YEAR

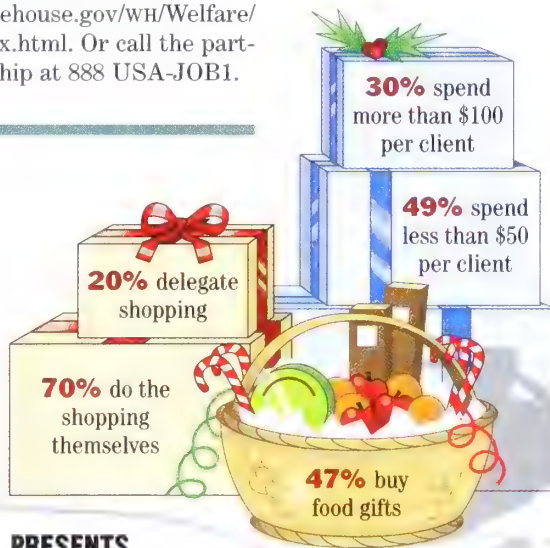
NUS FOR WELFARE HIRING

Two years into the federal Welfare to Work initiative, few small businesses are participating. While many owners have legitimate reservations, lack of information plays a role, too. A study from the Jerome Levy Economics Institute at Bard College shows only 16% of small employers who hired new workers in early 1998 took on former welfare recipients, even though 75% said they would hire such workers if the government partly subsidized wages. Guess what? It does. Even

monsters, it of abs Inc. delphia, success ng sever wel-pipients. different ing any vel per-says.



the members of the nonprofit Welfare to Work Partnership—a coalition of companies that hire ex-welfare recipients—are missing out. A survey showed only 12% of members with fewer than 50 workers were taking advantage of two key federal tax credits. “Small companies are leaving a lot of money on the table,” says the coalition’s Michael Barbera, adding there are also state and local funds. For more info, visit www.welfaretowork.org or www.whitehouse.gov/WH/Welfare/index.html. Or call the partnership at 888 USA-JOB1.



AUGUST 1998 POLL OF 500 CEOs AND CFOs AT BUSINESSES WITH FEWER THAN 100 EMPLOYEES

WHERE THE BLAHS ARE

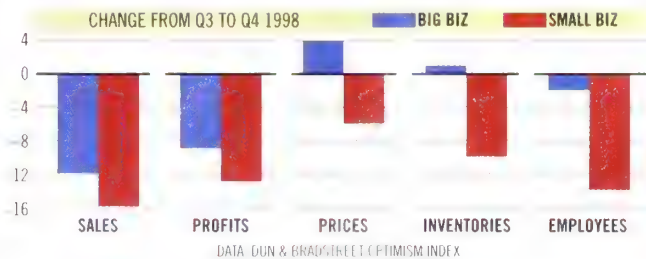
Feeling blue? It's not the holidays, it's the economic outlook. Dun & Bradstreet Corp.'s latest optimism index shows small businesses turning bearish, while Corporate America sees a few bright spots. Even where big business sees a squeeze, small business is feeling more pinched. The D&B results are confirmed by a study from the National Federation of Independent Business. Its September optimism index was the lowest in two years. And only 2% of small firms reported price hikes in the first nine months of 1998, matching recessionary 1992. Historically, optimism is still pretty high. As FIB Chief Economist William C. Dunkelberg notes: “‘Weakening’ from arguably the strongest level of economic activity in history is not particularly bad.”

PRESENTS ACCOUNTED FOR

If you're just now choosing yearend gifts for clients, you're late. Two-thirds of business owners do it between October and November, finds an American Express Co.* poll. Many are celebrating the past year's jolly economy: 37% will spend more than in 1997. Only 4% will spend less.

BIGGER PAIN FOR SMALLER BUSINESSES

Entrepreneurs are less optimistic than Corporate America about '99



IN MANY WAYS HOME-BASED BUSINESSES ARE MUCH LIKE OTHERS...

	HOME-BASED	NOT HOME-BASED
YEARS IN BUSINESS	13.9	14.5
CHECKING ACCT. BALANCE	\$14,700	\$15,200
BUSINESS CREDIT	\$62,500	\$62,600
HOUSEHOLD INCOME	\$108,400	\$113,200

DATA: PSI GLOBAL RESEARCH

... BUT THERE ARE A FEW DIFFERENCES

	HOME-BASED	NOT HOME-BASED
GROWTH IS 'EXTREMELY IMPORTANT'	11%	21%
HAVE BUSINESS INVESTMENTS	53	39
LIVING SINGLE	15	9
SOLE PROPRIETORSHIP	72	52

ORDING TO A POLL FROM THE ARTHUR ANDERSEN ENTERPRISE GROUP

THE TWO BOTTOM LINES: PROFITS AND PEOPLE

Entrepreneurs are finding that their consciences can be a guide to growth

At Bagel Works Inc., a Keene (N.H.)-based chain of bagel stores, there's an unusual December ritual. At all nine outlets, employees sift through local charities that they think might deserve help, and come up with five nominees. The winners are selected by secret ballots—cast in the stores by customers. For a year, the victors win financial support, promotional space at Bagel Works, and often free bagels.

To co-founders Richard French, 34, and Jennifer Pearl, 31, the elections are a winner on several levels. They help with marketing and community relations, and boost employee morale. But they also reflect the owners' commitment to running the business with an eye on values, not just the bottom line. At the 10-year-old, \$5 million company, the 140 employees benefit from "open book"-style management, and environmental concerns guide day-to-day operations. Most striking, for the past three years, Bagel Works has donated 10% or more of pretax profits to charitable causes such as homeless shelters.

Sounds nice, but does it make business sense? "Some could argue that we may be able to make more money," concedes French. "But if we weren't doing some of those things, we might have a lesser quality of employee or more turnover." And, he adds, based on shoppers' responses, "it absolutely relates to customer loyalty."

French's instincts are well-intentioned, and they're also well-grounded. Consultants cite growing evidence that socially conscious behavior brings tangible rewards far in excess of foregone profits and time invested. The payoff can come in the form of higher productivity, because employees want to stick around—a big bonus in a tight labor market. It could show up in new business, because you've helped build a stronger, and thus more economically vital, community. Or it could



NICE GUYS DON'T TANK: Joukowsky and Goldman want AquaFuture to make money and feed the world

mean customers switching from one of your rivals simply because they admire your efforts—a powerful competitive edge, says Brian Lunde, senior vice-president of Walker Information, an Indianapolis market-research firm. "A socially conscious company, all else being equal, is likely to be viewed more favorably," he says, citing studies of consumer behavior.

At the very least, there is no evi-

dence that socially conscious businesses are less profitable as a group, and considerable evidence that they gain a special advantage, says Allan R. Cohen, a management professor at Babson College in Newton, Mass. "It doesn't subtract from the bottom line, it adds to the bottom line," says Robert W. McGregor, president of a Minnesota coalition of socially responsible businesses.

Just how many entrepreneurs are s-

COMPANY CULTURE

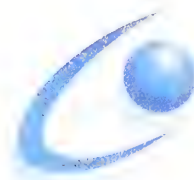


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Social Issues

cially conscious is hard to pin down, since the definition can vary so widely. But if you think it means a few idealists selling granola at a loss, think again. A broad swath of Baby Boomers have melded '60s idealism with the profit motive, and younger entrepreneurs are picking up the thread, too. "I hear a lot more now, 'How do I make this serve my passion and make it a success?'" says Kirk O. Hanson, a professor at Stanford University's business school.

For some, being socially conscious is the basis of the business itself, such as companies that make environmentally sound products. For others, like Bagel Works, it's the way they conduct business and relate to their community. But what unites these owners is the old cliché about doing good and doing well. "I have two bottom lines to my activities," says Tim Joukowsky, one of the founders of AquaFuture Inc. in Turners Falls, Mass. "Am I making money, and am I solving social problems?"

Joukowsky, 37, thinks he's on the threshold of doing both. AquaFuture grew out of a college project his buddy Josh Goldman did on sustainable fish-farming. The company was launched about 10 years ago and quickly garnered research grants. Its patented technology allows more fish to be raised in a single huge brewery-size tank than most fish farms produce on 400 acres, with low environmental impact. The business—which he says can help increase the world's protein supply—will chalk up about \$1.7 million in revenues this year.

What about the tradeoffs? He concedes that being idealistic is not the fastest way to make money, and his company isn't profitable yet. But Joukowsky vows that it will be next year. He says he learned long ago that you can't make a sustainable contribution to the environment if you don't have a sustainable business.

For the growing number of small companies that outsource production abroad, social consciousness can mean trying to influence and improve working conditions in foreign countries, says Marc J. Epstein, a business professor at Rice University in Houston. Take Mark Juarez, 41, owner of San Leandro (Calif.)-based Tender Loving Things Inc., which markets bath products made in China. Juarez rejected several plants because of child labor and deplorable

working conditions. But the ones he did select had problems, too. "You could almost fall over from the fumes," said Finance Director William L. Keyes. To help, the company set up a task force to improve processes and working conditions. The results so far: better sanitation, more safety equipment, and cutbacks in 16-hour days and 7-day weeks. Not by coincidence, product quality and productivity have improved, too.

Others see a direct marketing benefit. Hoboken (N.J.)-based Cloud Nine, which makes natural chocolates and confections, advertises on its packaging that 10% of its profits go to protect the Brazilian rain forest—where most cocoa

isn't universally popular. Bagel Works French remembers years ago when local AIDS group they supported set up table at one store for a day, where the distributed pamphlets, red ribbons—and condoms. One mother called French to protest that she hadn't planned to turn an errand with her child into a sex education lecture. French apologized. "Early on, we were just these idealistic kids. We have matured a little bit," he says.

How much should a company give? Groups like the Minneapolis KeyStone Club ask members to start at 2% pretax profits. Others choose to donate time and expertise to nonprofit groups, for instance, setting up a new purchasing

The Righteous Stuff

Some resources for the socially conscious business owner:

BUSINESS FOR SOCIAL RESPONSIBILITY

415 537-0888

www.bsr.org

Regards social responsibility and profitability as compatible goals. Offers conferences, educational programs for the public, and consulting for members.

CO-OP AMERICA

www.coopamerica.org

Web site features the Green Pages, a searchable directory of products and services from environmentally and socially conscious businesses.

SOCIAL VENTURE NETWORK

415 561-6501

www.svn.org

A 400-member group of business leaders and entrepreneurs. Web site has info on the group's special initiatives, such as a program to involve businesses in urban areas.

BEYOND THE BOTTOM LINE: PUTTING SOCIAL RESPONSIBILITY TO WORK FOR YOUR BUSINESS AND THE WORLD

By Joel Makower

(1995, Touchstone Books, \$14)

Gives a history of Business for Social Responsibility as well as advice on making your business socially conscious.

75 BEST BUSINESS PRACTICES FOR SOCIALLY RESPONSIBLE COMPANIES

By Alan Reder

(1995, JP Tarcher, \$12.95)

Offers practical case studies on how increased social responsibility can increase profitability.

COMPANIES WITH A CONSCIENCE: INTIMATE PORTRAITS OF TWELVE FIRMS THAT MAKE A DIFFERENCE

By Mary Scott

(1994, Citadel Press, \$12.95)

Profiles of 12 profitable U.S. companies that demonstrate social responsibility.

beans grow. President Joshua Taylor, an avid environmentalist, says the business has \$10 million to \$15 million in sales, thanks in part to customer support for its cause-based marketing. "It pays for itself," he says.

POPULAR CAUSE. Research supports Taylor's belief. In a 1996 survey of 2,000 people conducted by Roper Starch Worldwide Inc. and Cone Communications of Boston, 76% of the respondents said they'd switch from their current brand to one associated with a good cause if price and quality were equal. That's up from 66% in 1993, and new figures due out in January show the trend continuing.

Of course, linking your company to a cause can backfire if you pick one that

system or designing new office.

And martyrdom isn't required. Even the most ardent advocates say your first obligation to the community is to have a successful business. After all, it would be very socially conscious to throw everyone out of work. "There's an infinite amount of good to be done and only finite resources," says Cohen. "Think about issues that matter to people who work for you, the community you practice in, and your customers. What are appropriate causes that enhance your reputation with each of those constituents?" That's the difference between the new and the old idealists—they're crunching numbers along with their granola.

By Robin D. Schatz in New York
with Claire Poole in Houston

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FRIDAY, THE RABBI SOLD SERMONS

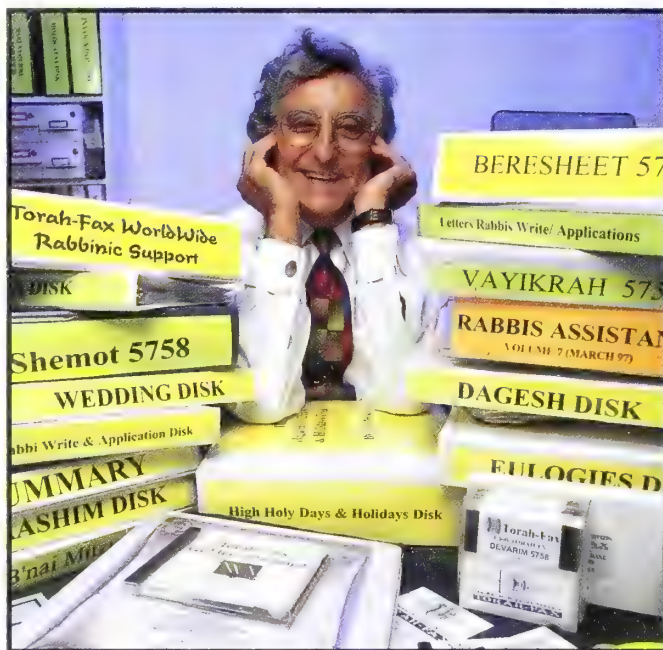
Torah-Fax zaps E-mail inspiration to religious leaders

One hand steering his Mercedes, the other clutching a cell phone, Rabbi Bernhard Presler, 62, is answering his new calling while driving down a Fort Lauderdale highway. A reform synagogue leader for three decades, Presler is now in the "clergy support" business, zapping out canned sermons by E-mail and counseling overstressed rabbinical peers—often from his car.

Some rabbis say that his service offers too easy a shortcut, but there's no doubt about it: Presler certainly has clients. The calls pour in. "Bernie," pleads one rabbi, "do you have a prayer for removing a wedding ring from the deceased?" Amiable, with a dash of calming wisdom, Presler assures them he can help.

"The clergy today are swamped," explains Presler. Indeed, he compares the leader of a sprawling modern congregation to an overtaxed corporate CEO. Scholarly life at the neighborhood *shul* has been replaced by board meetings, building committees, personnel problems—and as many as 100 sermons a year. "Every week is like writing a new PhD thesis," he says.

SPECIAL BLESSINGS. Enter Torah-Fax, the Davie (Fla.) research and support operation he founded six years ago that now ministers to 430 rabbis—an estimated 15% of the pulpits in America's three major branches of Judaism. ("Torah" is the Hebrew term for the first five books of the Old Testament.) For \$400 per year, Presler ships bimonthly sermons tied to the Bible. Members get two to three additional "last-minute" sermons a week—news-driven submissions drawn from Presler's network of scholars and authors. (A \$1,500 VIP service throws in all the products Presler sells separately, such as



“The clergy today are swamped. Every week is like writing a new PhD thesis”

— RABBI BERNHARD PRESLER, President, Torah-Fax

a Eulogy Disk or audiotaped conferences.)

Subscribers may also tap the restless mind of Presler himself—and his 50,000-item database. Can't find a blessing for a new set of twins? Presler, at 800 TORAH-FAX, can. "Rabbis are expected to be supermen. Anything that can make their lives less hectic makes their lives better," he says.

That view irritates some. "Preaching is an art. It requires you to do the hard work if you're going to do it well," says former subscriber Gary M. Bretton-Granatoor, senior rabbi at Manhattan's Stephen Wise Free Synagogue.

Congregational leaders echo the concerns of Rabbi Steven Dworken, executive vice-president of the orthodox Rabbinical Council of America, who

says what matters is how it's used. As a tool, Torah-Fax is fine, says Dav Magidson, president of the 585-family Temple Judea in Coral Gables, Fla. But he says, "we hired a rabbi for his originality, his feeling, and his belief. Presler doesn't disagree. The sermons are meant to inspire, "not to be regurgitated word for word"—although detractors say it occasionally happens.

Presler moved into business in 1992 after his contract at South Florida synagogue expired. He and editor Rabbi Jack Riemer, a well-known scholar and writer, began building a database, organizing material by subject. Much of it is topical.

"There are books of sermons, but they're not up-to-date," says North Miami Beach rabbi Max Lipschitz. He can call up Torah-Fax and ask for the latest on, say, abortion, and he finds it.

CHRISTIAN MISSION. Through word-of-mouth and direct mail, Torah-Fax is adding subscribers a year, says Presler, and reaches 35 states and 12 foreign countries. With three full-time employees, Presler sells more than 100 products: customizable letters to grieving families, Bar Mitzvah sermons, and even "time management for rabbis" software. This year's revenues are expected to top \$200,000, and the business has been profitable since its launch.

Now, Presler is hoping to inspire a new market: the Christian clergy. His latest project, dubbed "Bible-Fax,"

takes aim at the estimated 400,000 churches in America. As Presler sees it, the message of many sermons is universal. And he has commissioned a friend from interfaith meetings to adapt some of the sermons in his database into a Christian framework.

They'll have plenty of competition, though: More than a dozen services already cater to Christian denominations one way or another, according to Stan Purdum, editor of *Homiletics*, a nonprofit quarterly that publishes sermons. "Generating a new idea every week is hard," Purdum says—for any clergyman. Presler, for his part, remains confident he can find common ground. Just call it a leap of faith.

By Dennis Berman in Davie, Fla.

TWO OUT OF THREE NEW BUSINESSES ARE STARTED IN THE HOME... AND HOME WORKERS ALREADY NUMBER MORE THAN 15 MILLION. Source: Fast Company, January 1998, www.fastcompany.com



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WARM-AND-FUZZY TO COLD HARD CASH

How Gooseberry keeps its homespun catalog cookin'

When Susan Brzozowski picked up the Gooseberry Patch Co. catalog in 1993, the avid craftswoman planned only to browse. "I'm not big on mail order," says the 45-year-old former math teacher. "I like to see things before I buy them." But the cheery tone and "cute lettering" of the hand-drawn country-store catalog lured her into a purchase. Now she's a regular, buying at least one item for her Ellicott City (Md.) home each year.

Loyal buyers like Brzozowski are the soul of Gooseberry Patch, a mail-order retailer of homespun decorations and utensils, most for less than \$20 each, based in Delaware, Ohio. "The Patch," as the company is often called, has a winning marketing strategy: turn customers into friends. "We're selling the warm and fuzzy, the sense of home," says co-founder Jo Ann Martin, a former first-grade teacher.

Don't be fooled by the image. The company is a tough rival in a cutthroat business. Some 7,000 catalogs jam the U.S. mail annually. As a group, they'll gross about \$51 billion this year, says the Direct Marketing Assn. Most firms are tiny. Gooseberry's \$7 million in fiscal 1998 sales puts it ahead of the 6,000 catalogs that gross \$3 million a year or less.

MUSLIN BUNNIES. Martin, 42, and neighbor Vickie L. Hutchins, 47, started the company in 1984 with a grubstake of \$5,000 each. The two suburban mothers have since perfected an over-the-backyard-fence style of customer relations that has won them devoted clients—100,000 repeat customers from January to September alone.

TOO CLUBBY? One consultant warns The Patch might have trouble broadening its base



SLOW START: Martin and Hutchins switched strategy

But winning those hearts was no skip down a garden path. The first catalog featured mostly reproduction antiques—\$400 easy chairs and \$200 punch bowls—in glossy photos. Orders reached just \$27,000, all for low-budget items such as \$11 Santa Claus chocolate molds. The two partners quickly regrouped and shipped a four-page brochure featuring muslin bunnies, candles, and 21 other under-\$20 items. Slick style and glossies were ditched for hand



lettering and sketches. They display goods with domestic tips and a mulled cider recipe, inviting ideas and recipe from readers, too.

The response was so good that The Patch began sprinkling contribution through all its catalogs, giving client an emotional stake in the company. Their customers—mostly middle-class Midwestern women born in the baby boom years—now supply ideas and family stories through the mail, a toll-free hotline, and a Web site, www.gooseberry_patch.com. This year Brzozowski sent in an idea for making fall napkin holders from leaves. Customers even mailed in photos of their children. It's no surprise the company's surveys have had response rates as high as 50%—well above the industry's 10 to 15% norm.

Client input has been gold in more ways than one. By 1991, Martin had some 800 recipe cards. In May, 1992, the company became *Old-Fashioned Country Christmas*, the first of 35 hardcover and softcover books on subjects ranging from afternoon tea to herb cooking. By 1998, books were 42% of retail sales. The Patch also has expanded into wholesaling. Deals with outlets such as Nordstrom Inc. have brought its books to 2,000 U.S. shops.

The chummy style may not work forever. The Patch grows. Dick Hodgson, a leading catalog consultant, warns that being too clubby can hurt a company's ability to bring in new buyers. "Most of these clever, unique approaches won't have longevity, or grow to plateau," he says. But, he adds, The Patch is showing strong growth in a weak year for most catalogers.

In 1997, the company expanded to a nearby industrial park. Inside, telephones are ringing with 3,000 orders a day. But cheerful staffers still take time to chat. "It's like we're sipping tea with someone over the phone," says 23-year-old Crystal Lappie, phone-sales supervisor. After all, you can't rush when you're selling hearth, home, and friendship.

By James O'Toole
Delaware, Ohio

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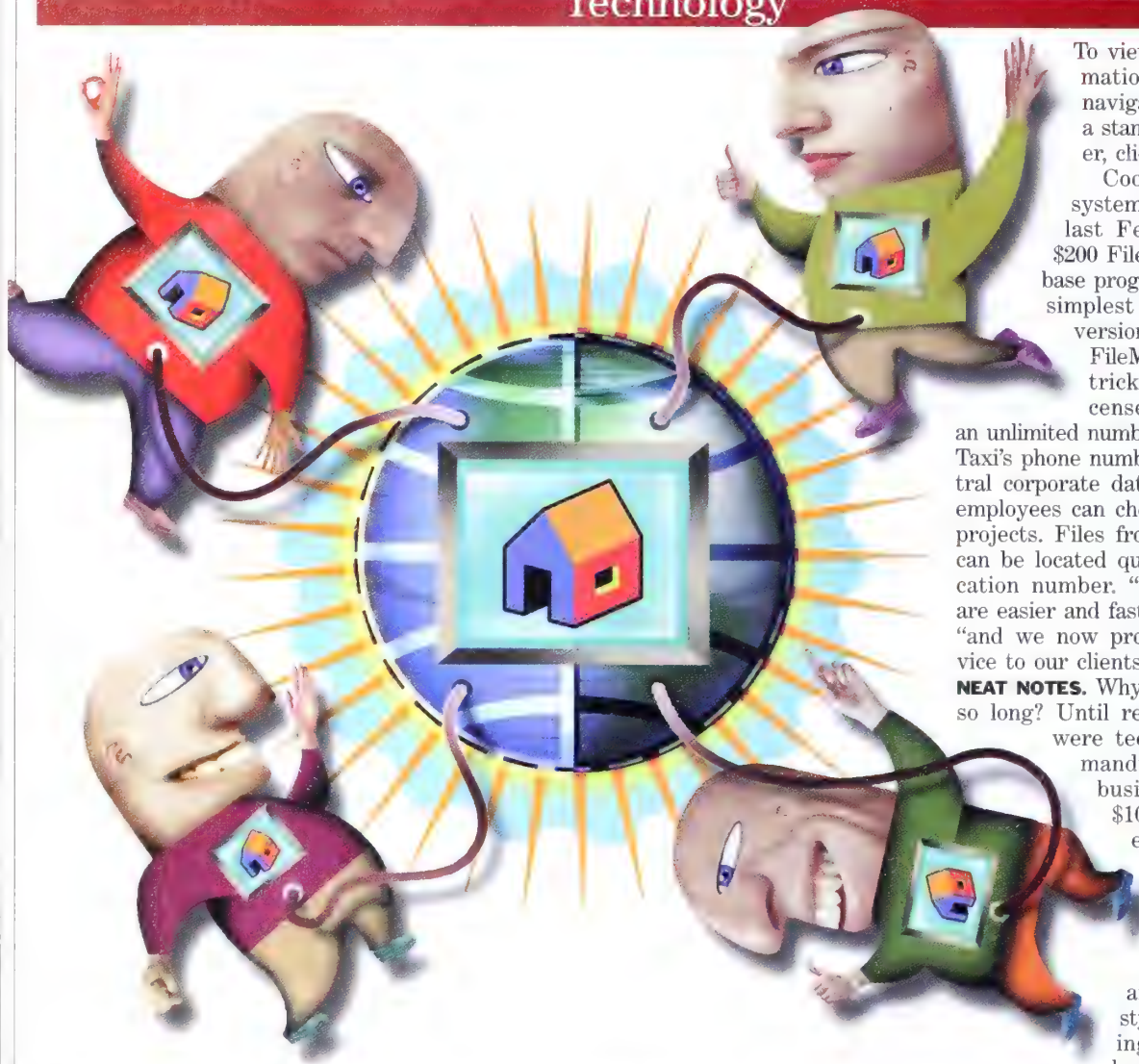
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Intranets simplify communication and data management

By 1997, David Cooper had spent a year wrestling with the network he inherited as systems manager at Toronto- and Montreal-based Taxi Advertising & Design, and he still didn't have the upper hand.

Checking a project's status with a colleague at the 40-employee company involved rounds of voice mail. It was nearly impossible to find anything on the company's local-area network. Widely needed client phone numbers were buried in personal Rolodexes, both paper and electronic. Files from past proj-

ects were stored in a labyrinth of network drives, directories, and folders. And if you wanted to read one, good luck: Each computer had its own applications, and each user had to figure out which application to use. If chaos were a system, this is what it would look like.

So Cooper, like many of his corporate counterparts in recent years, turned to an intranet. It's a private, companywide information system that looks and acts like a Web site, but only people in the company have access to it.

To view files and information, you simply navigate the site with a standard Web browser, clicking on links.

Cooper set up his system in a few hours last February, using \$200 FileMaker Pro database program. Perhaps the simplest and lowest-cost version of an intranet FileMaker Pro did the trick, with one licensed copy serving

an unlimited number of users. No, Taxi's phone numbers are in a central corporate database, and most employees can check the status of projects. Files from previous jobs can be located quickly by identification number. "Communication are easier and faster," says Cooper, "and we now provide better service to our clients."

NEAT NOTES. Why did Cooper wait so long? Until recently, intranets were technically too cumbersome for a small business, and, at \$10,000 and up, too expensive. In the past year, however, the picture has changed. Now, you can choose among intranet-style software coming from a few hundred to a few

thousand dollars (table). They're generally easy to set up and maintain. And because the intranet is Web-based, an intranet page can be accessed via Mac, PC, or UNIX workstation.

Useful as FileMaker Pro is, its capabilities are just the beginning of what an intranet can do. Helmers Publishing, a Peterborough (N.H.)-based trade magazine publisher with 62 employees, built an intranet based on a more expensive product called IntraNetics. While FileMaker Pro offers little more than the ability to search and sort through a database, IntraNetics serves

INTRANETS

up such interactive programs as an electronic calendar and address book. Helmers took down its cluttered corkboard and posted announcements on attractive Web pages. The bulky personnel and employee manual has gone electronic, too.

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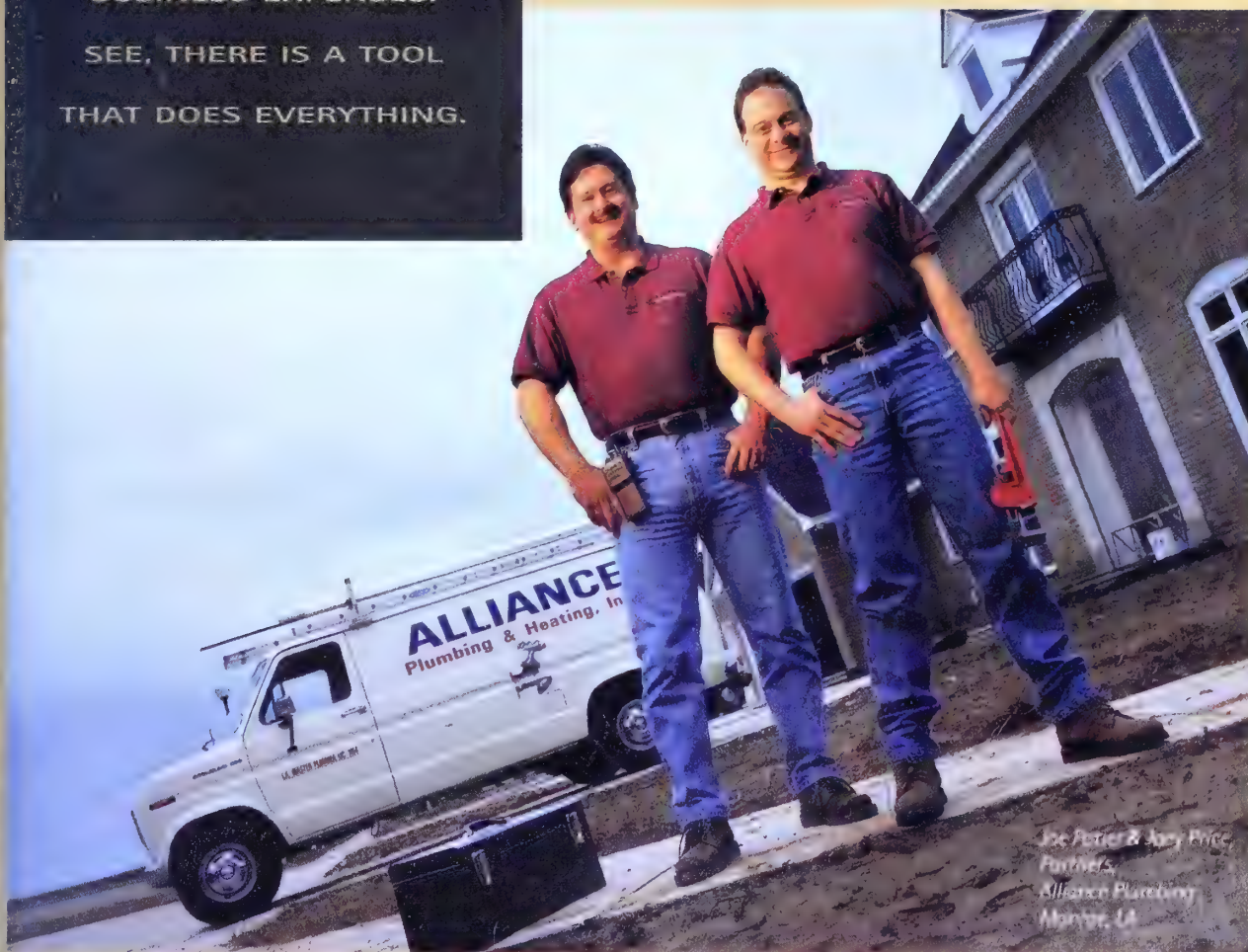
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relying on a network specialist—which means they stay current, says Corporate Marketing Director Carol Sanchioni. As soon as the company settles some security issues, salespeople will be able to tap in through the Web when traveling, too. “I love it,” says Carol Nelson, marketing communications manager at the publisher. “I can get all the data I need that affects me at that moment, like notes from a recent trade show.”

LONG-DISTANCE. Companies that want to give access to key partners, vendors, and clients can expand the intranet's function with an “extranet” that allows outsiders, with the proper password, to place orders and check their status over the Web.

PageMill, which can also create much more complex pages.

So which intranet is right for you? On the low end of the price spectrum, FileMaker Pro offers a fairly sophisticated but easy-to-use Web-publishing feature that you install on the company network. This can be done easily by anyone with basic networking experience. But unless you want to do a lot of work customizing, you'll only get to share pages that look like a simple database. It's not suitable for posting large documents, and it may not have the finished look that would impress outsiders.

For even less fuss and minimal setup and administration, consider another solution: Web-based subscription services,

study and posts it. I do the financial analysis and post to the same folder and the whole team can see everybody's input.” It requires little technical skill, but there are a few drawbacks to Web-based services. For starters, you can't customize such features as contact managers, and you connect to your site through the Internet, which for most small businesses means dialing out through a modem. That's much slower than a true intranet.

Another option is to buy a Web server, which—with its preinstalled software—is probably the simplest way to run the more complex small-business intranets. These devices come with hard drives for storage, built-in network con-

nections, and Web-server software, at \$1,200 to \$2,000. Web servers, such as Cobalt Microserve Inc.'s Qube 2700WG, Microtest WebZerver, and Whistle Communication Corp.'s InterJet 100, are for nontechnies who want to plug in a device, connect it to an existing network, and build an intranet. Anyone with basic network knowledge should be able to handle it with little effort.

POLISHED. Finally, for more polished applications than are available on the Web or come with Web servers, consider Helmer IntraNetics 97. Its features include sophisticated database capabilities, comprehensive document-sharing, and graphics-based applications similar to those found on large corporate intranets. IntraNetics is priced attractively for smaller businesses (\$99 for up to 25 users), but it requires more technical expertise to configure and maintain than the other intranet approaches here. Also, because it must run on a network that has Windows and Web-server software, you'll probably need to hire a consultant to install all three programs unless you're handy with computers.

Still, an intranet may be worth the cost, as David Cooper will attest. It won't solve all your business problems, but at least it will put everyone on the same page.

By Wayne Kawamoto in Los Angeles

For details on intranet products, click on Online Extras at enterprise.businessweek.com

Getting on the Same Page

Any intranet can provide easier access to the latest internal information—but some do it better than others. Here's a look at the options.

PRODUCT	CAPABILITIES	PROS	CONS
FILEMAKER PRO	View pages in a FileMaker Pro database.	Low price, easy setup.	Lacks ready-made applications such as schedulers and document sharing.
WEB-BASED INTRANETS	Connect through the Internet to a dedicated Web site to share documents and use other services.	Low cost, easy setup, and low maintenance. Excellent for companies with scattered work sites.	Connection usually by modem, which is slower and more cumbersome. Little customization.
WEB SERVERS	Hardware devices connect with existing network and intranet capabilities.	Simple installation of powerful, complete hardware.	Requires strong computer skills to run; consider hiring a consultant.
INTRANETICS 97	Most similar to a corporate intranet with built-in applications for scheduling, sharing, and more.	Sophisticated, ready-made applications at a price lower than a traditional intranet.	Setup and maintenance beyond most nontechnical people.

DATA BW

The burdens of launching an off-the-shelf intranet are relatively light. If you have some experience handling a network, you'll have no problem installing and maintaining many of the small-business-friendly systems. For employees, getting info from the intranet demands practically no skill. Creating basic intranet documents is simple, because you don't need to know computer coding anymore. Common business software, such as Microsoft Word, Excel, PowerPoint, and Corel WordPerfect, can convert routine documents into Web-ready ones with a couple of clicks. (Making them look attractive requires somewhat more skill.) Employees will need some training to post their work on the system. But novices should be able to learn in a day, using such programs as Microsoft Corp.'s Front Page or Adobe

such as HotOffice, 3-2-1 Intranet!, eRoom, and Netopia's Virtual Office, which mimic a company intranet and are reached by logging onto a Web site. Subscribers pay a monthly charge of \$10 to \$30 per user. These Web-based services are great for companies whose workers are widely dispersed. “We needed to work collaboratively, not with someone in the next office but in another office across the country,” says Jeffrey Stello, president of IT Financial and interim chief financial officer for Healthy Pet, a startup planning to run veterinary centers in Pennsylvania.

Healthy Pet uses HotOffice, which affordably enables key personnel in three states to work together through bulletin boards and document centers. For example, says Stello, “one person puts together the market demographic

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FROM 'BLANK LOOKS' TO BLANK CHECKS

Whitney Johns's women-oriented venture firm helps clients get "fund-raising fit"

Whitney Johns knows from experience how women entrepreneurs struggle to raise capital. In 1994, she couldn't get a loan to expand Whitney Johns & Co., a consulting firm she founded in 1986 to help small and midsize companies with acquisitions. As a board member of the National Association of Women Business Owners, the Nashville-based entrepreneur met many other women with the same problem. So she founded Capital Across America (CXA), an investment firm focusing on women-owned businesses.

In June, CXA and the Women's Growth Capital Fund, in Washington, D.C., became the first women-oriented venture funds to be federally licensed as small-business investment corporations. Having raised \$6.8 million, Johns's firm is eligible for an additional \$20.4 million in low-cost capital from the government. So far, it has committed \$2.7 million to four companies—which makes her a big player, if only by default. The 315 SBIC licensees nationwide now command an investment pool of \$7.7 billion. But in 1996, just 1% of SBIC funds went to women-owned companies. Johns, 40, spoke with *BUSINESS WEEK* Staff Editor Edith Updike. Some excerpts:

Q: Let's start with a capsule description of what CXA does.

A: Capital Across America provides mezzanine capital [a second round of financing] to growing companies that need at least \$300,000 to expand. Our focus is women business owners, but we're not exclusively for women. We don't want to discriminate the other way. But we want to make a concerted effort to educate women about not only our fund but also other funds, and how to use this money to grow companies. Most small businesses need more than just money.

Q: How does this venture reflect your own experience?

A: As I expanded, I could not find growth capital. I couldn't borrow from a



bank because I was in a service business that did not have tangible assets. I had a good business, but it was not bankable. I think up until the mid-'90s, that was a typical experience for women business owners. We've seen a tremendous change in the last two years.

Q: Any thoughts on why?

A: There's been a lot of exposure of

the size and quality of the women's business community, which is now over 8 million business owners employing over 8 million U.S. company workers. When each company may be small, combined they represent a tremendous amount of purchasing power—\$2.3 trillion in sales.

Q: How have women's capital needs changed?

WOMEN AND CAPITAL



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ENTERPRISE

Roundtable

A: Eight years ago, they needed start-up money or small amounts of money. Five years ago, the numbers started climbing. They needed a few hundred thousand. Now they need half a million, a million. There's a need all over the country for capital in the half-million to \$2 million range.

Q: *Doesn't venture capital fit the bill?*

A: The average venture capital investment in the country right now is \$6.9 million. That's just more money than most women owners need when they're expanding a business. And most small-business owners—women in particular—do not want to give up ownership of the company they've struggled to start.

and don't quite know the market

Q: *Do women have a different approach to business than men?*

A: Yes. They often underestimate the potential. Usually a guy will shoot for the moon and know that it's unrealistic but he thinks: I'm going to ask for five times as much as I need in hopes that get what I need.

Women, on the other hand, often don't ask for enough money to really accomplish what they want to accomplish. They're much more conservative in their risk-taking. I don't advocate that women shoot for the moon or overestimate their needs. I want women to stay conservative so that they're successful when they stretch. But I am seeing a trend for women to stretch.

HANGING BACK: "Women often don't ask for enough money to really accomplish what they want"

The other problem with venture capital is it's very focused on high-tech and biotech, the real jazzy businesses. That field is very narrow, whether you're a man or a woman, and has been a little tougher for women to break into. If you have a basic business that's making \$5 million—it's not very pretty, but it makes money—it's not going to be attractive to the venture capitalist.

Q: *Did you have trouble selling a women-oriented fund to investors?*

A: It was very difficult to raise substantial money and took about a year and a half. I had to go outside of my existing network and talk to people who didn't really understand the dynamic women-business-owner market. We talked to a lot of people who had blank looks on their faces.

Q: *What was so hard to understand?*

A: There's a disconnect between who has the money and who needs the money. Both mezzanine and venture funds were managed mostly by men, who were comfortable dealing with men. Now, we're seeing more women going into the capital-providing professions, and they're more attuned to the needs and language of the women business owner.

My travels [to meetings of women business owners] were great training. Most guys don't attend those events

Q: *Are there areas in which women have an edge?*

A: One of the assets that is most undervalued in the "male world" is networks. Women have a very good ability to develop relationships and networks—with their customers, with their employees, with their suppliers, with outside consultants, and so forth. The accounting world doesn't take into account the value of networks, but it can make all the difference in the world. It can save a business in an economic downturn.

Q: *What advice do you have for small companies seeking capital?*

A: Have a short summary—both oral and written—that is so compelling that someone like me will read the full business plan. Sometimes you have only 60 seconds to make an impression.

Second, have an excellent business plan. Most people focus on the product or the service and forget the financial section. Women in particular need to focus on this section; it's usually the weakest link we see in the business plans we receive.

The third thing is what I call becoming "fund-raising fit." Raising money is very complicated. They should become very knowledgeable about the process. Get a lot of advice. Seek a mentor. A good adviser in this area is well worth the money.

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TALENT TRAWL: WHAT'S THE BEST BAIT?

Customized compensation allows small outfits to recruit and hang on to top hires

Jonathan King was an employer's dream catch. The 26-year-old had already run his own successful Internet design business and was happily employed as a well-paid securities lawyer at one of Chicago's more prestigious firms. Yet when another employer approached him with promises of something bigger and better earlier this year, King took the bait.

Was the successful suitor a giant deep-pocketed corporation? Guess again. King was picked off by American Information Systems

ENEFITS

Inc., a local Internet consulting company with 60 employees, which wanted him to manage sales of its Web site, Internet, and extranet services.

How did AIS do it? For one thing, the company offers employees a comprehensive benefits package that includes good health insurance, a 401(k) plan, and profit-sharing. But the coup de grâce in King's case was a stock-option deal that could make him rich if the company ever goes public. "The key thing that pulled me away was opportunity," King says. "Besides being in an exciting industry, I am positioning myself to make a lot more money down the road."

LARGESSE. As for AIS, they don't begrudge him the extra bounty. "We recognized pretty early in our company that employee hiring and retention was going to be a key factor in our growth and success," says Chief Financial Officer Michael Hakimi. So while AIS gives all employees a benefits package, it directs extra rewards to particularly valuable executives.

Such largesse might have raised eyebrows in past years. But the short supply of talent is forcing small companies to raise the ante when they compete with larger rivals for new people—and



PERKS PLUS: Pensions tied to profit-sharing needn't be offered to all

to retain their best employees. That's no easy feat, because cash is short at many private companies. On top of that, federal rules don't allow employers to beef up the standard pension plan, health plans, or company insurance for a key individual unless everyone else gets the same terms.

The solution? Shore up your basic

benefits to make sure they are competitive, then top them off with customized compensation that is carefully designed to avoid running afoul of federal fairness rules.

ROOM TO MOVE. It's not as daunting as it seems. For starters, there's the fact that you offer benefits at all, which gives you a leg up. Since 1996, the number of small companies offering retirement plans has declined by a third, to only one in five; just 39% offer health care, says Dun & Bradstreet Corp.

The reason is hardly a mystery: A good package of perks can cost 40% of top of salaries. If you had to improve

A photograph of Maria Barraza, a woman with short dark hair, wearing a black long-sleeved top. She is leaning over a dark wooden table in a workshop. On the table are various sewing tools and materials. In the background, there are mannequins wearing coats, one red and one black, and large windows letting in natural light.

I hand pick the buttons on my coats. I'm not about to leave my cash flow to just anybody."

Maria Barraza
Designer, Owner of Barraza New York
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Management

benefits across the board for everyone in order to reward one key employee—which is what the federal rules imply—you couldn't afford to recruit.

But compensation experts say the rules can be bent to heap extra benefits upon top management—including yourself. One tactic is using multiple qualified retirement plans to boost compensation for top employees. Under federal law, only the first \$160,000 of income can be used to calculate benefits under pension plans commonly used at small companies. This includes one of the most lucrative incentives you have to offer—pensions tied to profit-sharing.

SEEING DOUBLE. You can get around that by splitting your pension package into two identical plans—and enrolling your high-paid workers in both. If they earn, say, \$200,000 a year, they can get credit for \$100,000 of salary in each pension plan, thus skirting the federal limit. It's perfectly legal, says Dennis R. Coleman, a principal at PWC Kwasha, a benefits consulting firm in Ft. Lee, N.J., and none of your lower-paid employees gets hurt. (You will need to carefully set up each plan's roster to make sure you don't jeopardize its tax-deferred status. And the rules don't allow this maneuver with 401(k) plans.)

But the real powerhouse for key employees is the so-called "nonqualified" pension plan. These plans, also known as supplemental executive retirement plans, or SERPs, allow employers to set aside additional funds for their top workers without regard to federal caps. In some SERPs, the employee continues to contribute tax-deferred funds; in others, money is set aside by the employer, says benefits consultant Howard B. Edelstein, a principal of the Todd Organization in Cleveland. Federal rules also let you show a little favoritism by offering employee-paid supplemental insurance at bargain rates—and raising their salary to cover the additional cost.

Those measures should keep most of your smaller rivals at bay. But what if you are up against a larger company

in bidding for someone's services?

Start by considering what the employee is most likely to want in order to be happy at your company (table). To woo an exec from a major company, for example, you probably can't match their salary dollar-for-dollar. But you can offer a chance to share in your company's future growth and profits.

AIS, for instance, gave Jonathan King stock options—an approach used by 12% of privately held U.S. companies that offers long-term incentives, according to *The Executive Compensation Answer Book*. Why so few? For one thing, own-

the stock can fall even if his or her performance was terrific. In response, Christopher Rich, president of Lyon Compensation and Benefits in Waltham, Mass., says that some companies are turning to "performance units" that reward key employees based on increases in sales, market share, or cash flow. The employee receives the units upon reaching a fixed performance target, and the units continue to rise in value based on subsequent performance.

The administrative costs are modest. Lyons can do the set-up paperwork on participation units for as little as \$5,000,

but you might be able to get started for even less. "It's not exactly brain surgery," Rich says. "Any good CPA could do the paperwork."

HAPPY HOURS. Beyond benefits and salary, don't overlook your secret weapon: the flexibility and intimacy of a small company. Some people simply aren't cut out for the plodding corporate lifestyle and vastly prefer to work for an entrepreneur. Then there are the sometimes unique lifestyle perks. At GoldMine Software Corp. in Pacific Palisades, Calif., all 135 employees have windows that front on the beach. And at the Institutes for Pharmaceutical Discovery, a drug-research company in Branford, Conn., catered lunches and weekly happy hours are window-dressing on top of good—but not spectacular—benefits plan.

But what really helps Pharmaceutical Discovery steal top biochemists away from the major pharmaceutical houses, says President James M. Nolan, is figuring out what each recruit needs and wants. "Because we are small, we can give personal attention to our recruiting effort," Nolan explains. "There are things we can offer that the large companies can't." That's hardly a license to start lowballing your best prospects. But it might pay to remember that not all workers are in this game just for the money.

By Linda Stern in Washington

BENEFITING YOUR BUSINESS

Here's how you might tailor a benefits package to suit different people in your organization.

THE 26-YEAR-OLD WUNDERKIND

- Stock options, phantom stock shares, or participation units
- A low-cost, catastrophic health-insurance plan
- Education assistance

THE 40-YEAR-OLD, FAMILY-FOCUSED WORKER

- Supplementary health and term-life insurance
- Family vision and dental coverage
- Flex-time, work-at-home days, paid vacations, holidays
- A tax-favored dependent-care savings plan
- A basic qualified retirement plan, even without a match
- A week at the boss's beach house

THE 54-YEAR-OLD WHO KNOWS YOUR COMPANY

- A qualified retirement plan... or two
- A defined-benefit plan
- A nonqualified supplemental retirement plan
- Cash-value life insurance and long-term care insurance

DATA: BUSINESS WEEK, TODD ORGANIZATION

ers are understandably reluctant to part with equity. Stock options are also very complex and can get entangled in securities law.

Instead, some owners have adopted so-called "phantom" stock plans. There's no real stock involved, but the value of the company is computed as if it were public, using a preset formula. The employee is entitled to compensation based on the implied value of the phantom shares. Often the value becomes part of a long-term retirement account, says Edelstein. That's a sweet deal for the company because it doesn't have to cough up precious cash until the shares vest—typically in three to five years.

The obvious flaw from the employee's point of view is that the value of

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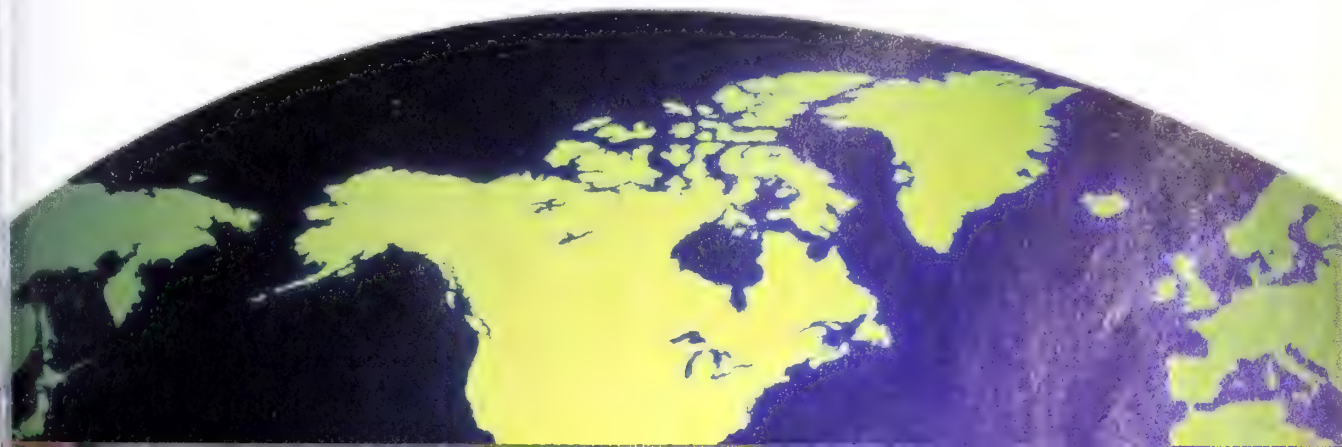
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RUSSIAN RELAY

How Pony Express delivers

If Russia were an easy place to prosper, a business such as Pony Express probably wouldn't even exist; some international giant like FedEx would own the market. Instead, most have pulled back, leaving the field wide open for American entrepreneurs Tim Bryant, 33, and Mark Wheeler, 32.

In the past five years, the pair have conquered a mountain of obstacles, including a crashing economy and devalued ruble, while making their Moscow-based delivery service one of the more successful small-business startups in Russia. "We've survived by staying flexible and listening to our customers," Bryant says.

The idea for a Russian rapid delivery company was evolutionary. Bryant, who majored in Russian and business at the University of New Hampshire, came to Russia to work for FDX Corp. in 1989 to help set up an internal, national service—an effort abandoned in 1992 when FedEx cut back its European network.

800% SOLUTION. Bryant, though, had glimpsed opportunity. Multinational corporations new to Russia—from oil companies to consumer-products makers—were hamstrung by poor transport and communications, and Bryant, having studied the logistical hurdles at FedEx, thought he could surmount them. He called his old college buddy Wheeler back in the states. A market researcher, he bankrolled the business with \$50,000 he'd saved working at his family's lumberyard.

Offering courier service between Moscow and 185 regional cities, Pony Express now does better than \$5 million in annual sales and employs 270. While sales have dipped slightly since Russia's troubles re-erupted last summer, Bryant says, the company is luring a record



WHEELER AND BRYANT: "We've survived by listening to our customers"

number of customers by cutting overhead and pricing services 15%-50% below competitors such as DHL Worldwide Express, the only significant foreign competitor on intercity routes.

Survival strategies developed in previous crises may make it easier to weather this one. When Pony Express started in 1993, inflation was above 800%, so it pegged prices to the dollar. That softened the blow of the recent devaluation. To avoid Russia's inefficient interbank payment system, the company often sent employees with bags of cash to pay bills. Eventually it opted for the government-controlled Sberbank—one of the few to keep operating after Russia's recent bond default.

Not surprisingly, Pony Express has earned a reputation for finding fast, clever solutions to local problems. After a Russian airline abruptly quadrupled fares on a crucial route, Bryant and Wheeler cut a deal with the pilots' union, paying cockpit crews to deliver their courier pouches. And when computer giant Hewlett-Packard Co. needed help managing its Moscow warehouse, Pony Express took the job. "They are a reliable partner, and very flexible," says Sergei Us-

pensky, HP's logistics manager in Russia.

Nevertheless, Pony Express has lured some big clients to DHL, which has an extensive internal network in Russia and offers volume discounts. But Craig Curphey, DHL's Russia manager, says Pony Express has proven a worthy adversary on the St. Petersburg route.

To stay competitive, Bryant and Wheeler keep a lid on expenses. The spartan headquarters are leased from

STRATEGIES

Moscow State University and still decorated with bust of Lenin. For marketing, they rely on one-to-one sales pitches to multinationals in Russia. Employees have to use their own cars for deliveries outside Moscow. Since devaluation, they have negotiated reductions in rent and shipping costs, trimmed some salaries, and made a few layoffs. "This crisis has been like a spring cleaning for us," Bryant says. "It has made people refocus on controlling costs."

The biggest worry today is that multinationals could curtail or shut their Russian operations. For now, Bryant and Wheeler insist that they're still profitable, and they've just added four vehicles to their fleet. Like the sagebrush lilies it's named for, Pony Express seems determined that the mail will get through.

By Carol Matlack in Moscow

POUCH SMARTS:

On one route, cockpit crews serve as couriers



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BY KEVIN KELLY

YOU CAN'T MAKE LEADERS

I tried, with disastrous results. Now I pick out people who already have that quality—and foster them

Train Anyone to Become a Leader," shouted the brochure's big, bold headline. Another seminar for middle managers, I sighed as I tossed it into the wastebasket a few months back. But the headline kept popping into my mind at unexpected moments. Now I know why it bothered me: It's simply not true. Not everyone is meant for leadership.

In our family business making plastic bags, we have tried to make leaders out of some of our best employees—with disastrous results. They may be tops when it comes to fixing machinery, but when it's people and organizational skills, forget it. And no amount of training seminars or mentoring has worked. I know I shouldn't feel this way. After all, management gurus preach that senior managers like me should transform every person we hire into a leader. "Each of us contains the capacity for leadership," writes Warren G. Bennis in his book *On Becoming a Leader*. Maybe so. But given my limited resources—and the drag on morale a poor leader can impose on our small business—I can't waste time as someone gropes for his inner self.

DISILLUSIONED. I didn't always believe this.

When I came into my family business 2½ years ago, I had a more democratic vision of leadership that counted on everyone leading and everyone taking responsibility for their work. I was gradually disabused of such notions. One veteran supervisor provided the final push. We wanted him to pay more attention to production targets and enforce discipline. I had several reviews with him and sent him to a variety of seminars on supervision. But he didn't change, in part, I think, because he believed seniority protected him. It didn't; we moved him out of his management job.

Indeed, evidence keeps mounting that true leaders are rare beings. We recently

promoted a longtime employee who had proven himself adept with machinery and at teaching others his skill. We knew he was less effective when it came time to discipline employees or provide direction. Still, when a management slot came open we decided to give him a chance.

Lord knows, he tried. He logged long hours. But he wasn't able to develop production procedures in either our press or bag departments—goals we put high on his priority list. We sent him to classes on how to supervise and gave him books about getting organized. But when the going got tough, he fell into old patterns.

By contrast, take Evelyn Martin. For most of her 25 years here, Martin, 53, had simply packed bags into boxes. But she had always been a *de facto* leader. Managers sought her advice on handling personality conflicts. She trained new hires and prodded laggards to pick up output. When I came on board, I asked her for input, and she wasn't shy about telling me what she thought would improve her department. She was right.

So when sagging production and poor morale called for a leadership change, Martin got the job as production foreman. With no formal training, she has turned her unit around. Production has risen 25%, and absenteeism on her shift has plummeted. She has succeeded, in part, because she has a vision of how she wants her department to run. She's committed to increasing productivity and quality, she expects her people to work together, and she lets them know it. If crew members don't follow through, she holds them accountable, telling them clearly where they failed. She also rewards her crew for success. Whenever her team produces more than 1 million bags in a day, for instance, it's always doughnuts or pizza for everyone the next day.

Since I can't clone Evelyn, I try to stay close to employees, as she does. I talk to them, soliciting their

ideas. I look over daily reports and attend meetings to see who's vocal. It's

an imperfect method for identifying leaders, but it has helped me find some promising candidates. I pull these folks aside and pepper them with questions about their jobs.

By encouraging them to take more responsibility, I think I'll do better grooming leaders than if I had plucked people from the shop floor and sent them to one of those fancy seminars.

Kelly, a BUSINESS WEEK writer for nine years, is an officer at Emerald Packaging in Union City, Calif.



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No one has to ride herd on this teenager. At 17, Casey Collier, a high school junior in Shawnee Mission, Kan., is already a seasoned rodeo rider and marketer. ArenaWest Inc., the company she and her mother founded four years ago, sells clothing decorated with Western designs at rodeos and on the Internet.

A 1994 Christmas shopping trip planted the idea. Casey and younger sister Corey, both regulars on the rodeo circuit, wanted cowgirl-theme T-shirts as gifts for pals. But designs only featured cowboys. Said Casey: "Mom, let's just make our own." A few weeks later, a school counselor mentioned the Ewing Marion Kauffman Foundation's MADE IT program, a weeklong boot camp for mother-daughter entrepreneurs from around the country.

At the program's end, the Colliers beat out 11 other teams, winning \$3,500 in seed capital. Back home, they

Even Cowgirls Get the Profits

CORRALLING THE RODEO DUDS MARKET

priced local screen-printing services—and nixed the lowest bidder when he ignored Casey. All three Colliers think up designs, which the girls take to school for market research.

They started selling from booths at local rodeos in late 1995, roping \$50,000

in sales in six months. Since then, they've added baseball caps, denim shirts, and other duds to the T-shirt line, and put up a Web site, though their wares still sell best at big shows such as the National Rodeo Finals in Las Vegas. Now they're branding products with the ArenaWest logo, hoping to break into wholesale. Annual sales are "low- to mid-six figures." Profits go to college funds for the girls.

Casey, who plans to run ArenaWest from her college dorm, has gained more than just a nose for business. "I used to be a nervous Nellie," she says. "Now I'm calm." Or as calm as anyone can be when going at a full gallop.

By Edith Updike

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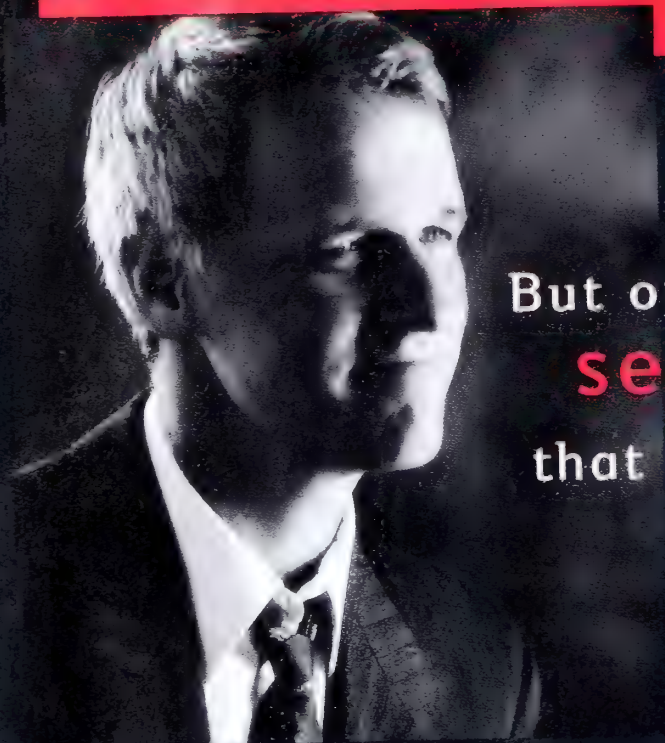


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JOHN MACKEY

BORN 1953 Houston

EDUCATION High school diploma, 1971

WHAT HE EATS Tofu, vegetables, fish; supplements such as ginseng, ashwaganda, and ginkgo biloba

WHAT HE WON'T TOUCH Red meat, coffee

HOW HE GOT INTO NATURAL FOODS Living in a vegetarian co-op after dropping out of college in Austin

HOW ELSE HE DIFFERS FROM OTHER CEOs Thinks most are "grossly overpaid"

1998 SALARY AND BONUS \$275,000

BOOKS CURRENTLY READING *Cold Mountain*, *Eat Right for Your Type*, *Handbook of Brand Management*

INTERESTS Yoga, meditation, scuba diving

TREPRENEURS

PEACE, LOVE, AND THE BOTTOM LINE

How ex-hippie John Mackey built a natural-foods empire

John Mackey is a bit of an enigma. With his shaggy, though thinning, hair and his passion for meditation and organic food, it would be easy to mistake the 45-year-old CEO of Whole Foods Market Inc. for an aging hippie. You can even find traces of the summer of '67 in the way he runs his \$1.4 billion health-food empire. Mackey espouses peace, trust, and employee empowerment as guiding management principles. But there's a lot more to Mackey than just peace. He's also a ferocious bear in the power of capitalism and the market. And woe to the labor union

that tries to tangle with him. Says Mackey: "I want to be taken seriously. I don't want to be dismissed as a flake."

There's little chance of that. True, Mackey took his first bite of tofu shortly after he dropped out of college and went to live in a vegetarian co-operative, named Prana, in Austin, Tex., in 1975. But from that unlikely beginning, he has gone on to build a smartly run and brilliantly marketed health-food empire that has tapped into a generation's yearning for healthy living and eating.

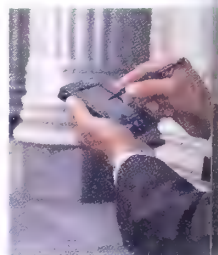
With 87 supermarkets nationwide, Austin-based Whole Foods is more than

three times the size of its nearest direct rival, Boulder (Colo.)-based Wild Oats Markets Inc. And since starting his first natural-foods store in 1978, Mackey has shown that his personal blend of capitalistic fervor, Japanese-inspired management principles, and idealistic vision of bringing the world a healthier diet can make big bucks. Earnings last year, excluding merger costs, jumped 55%, to \$46.5 million. And, with conventional grocers nibbling at his heels, Mackey is pushing for more. He has been acquiring a string of smaller regional health-food chains, including Bread & Circus, Fresh

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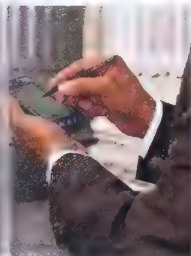
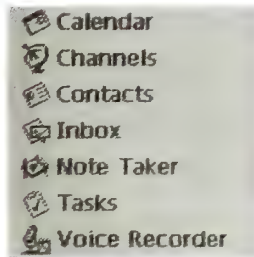
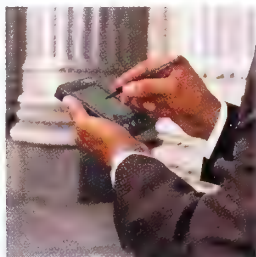
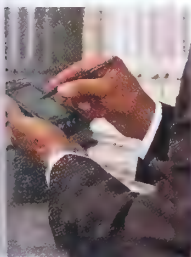
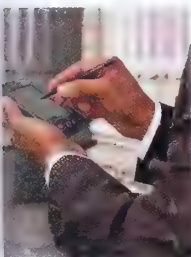
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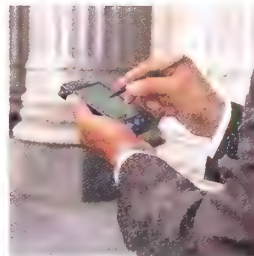


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PERSONAL WEALTH

elds, and Mrs. Gooch's. His aim is to reach 200 stores and more than triple sales to \$4.5 billion by 2003. From the start, Mackey has always been his own path. The son of an accounting professor-turned-businessman, Mackey refused to take no for an answer when he was cut from his high school basketball team in Houston for, says, being "a rebel." So he transferred to a school nearby where he managed to make the team. His family even moved three miles so he could attend new school. Explains Mackey: "I said, 'I won't accept this. I'm going to prove

Mackey swayed nearby grocers to join him by saying: "I may put you out of business"

that this was a mistake and I have to live with it." Once in college, Mackey delved deeply into his courses, developing a passion for philosophy and religion. "I was searching for the meaning of life," he says. But then it became clear his college texts weren't going to provide the answer, he lost interest and dropped out—first from the University of Texas and, again, from the University.

PAID HELP. While living in the vegetarian housing co-op and working at an organic natural-foods store, Mackey stumbled upon his calling. "It was the first time I realized what you ate could affect how you felt," says Mackey. With \$20,000 from his father, then CEO of a hospital-management company, and \$7,000 from a friend who had received an inheritance, the 25-year-old raised \$45,000 and opened Safer Way, a health-food store and restaurant in an old Victorian manor near downtown.

Unlike other veggie joints scattered around the college town, Mackey's store had to cater to a broader clientele by offering such things as refined sugar and products that some other health-food stores shunned. "It didn't seem like it had to be part of a certain lifestyle," recalls his former girlfriend and business partner, Renee Lawson Hardy. "Natural food was just a good thing."

A good thing, maybe, but not such a profitable business. Parking was scarce and the restaurant lost money at first because of the young couple's insistence on doing everything from scratch. To save expenses, the two lived on the third

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People

or with no shower or bath. Instead, y cleaned up in the oversized restau- it sink or by jumping into a chilly ing nearby.

But Mackey, an eternal optimist, con- ered the venture a success. After ning a tiny profit in his second year, went back to his father and asked \$50,000 to open a bigger store. Re- s his father, William S. Mackey: "I l, 'John, you've got this backward. i're supposed to succeed small and n expand.'" Still, he promised to in- t \$25,000 if his son could find someone to put up the other half. To his dad's azement, John came back in less than week with the money from a Safer y customer. Eventually, he raised ut \$200,000 in debt and equity for new venture.

INT PITCH. In his first taste of wheel- and dealing, he persuaded owners of earby organic grocery to join forces n him. His pitch was simple and char- aristically blunt: "If you don't come in h me, I may put you out of business ause I can sell cheaper than you ," recalls Mark V. Skiles, one of the e's owners. Mackey wasn't fooling nd. His first Whole Foods store was 00 square feet, four times larger than es's store.

Unusually large for its time and set up

On his first date with his future wife, a vegetarian, Mackey necked out her fridge

a grocery store, Whole Foods was an ant success. Because of its size, it d carry more natural and organic s than rivals. And it also promoted -stop shopping by selling such vege- an no-nos as red meat and coffee. So l were customers that when the store nearly destroyed by a flood in May, ., dozens pitched in for the cleanup, the company was back in business in days.

y 1990, when Mackey met his future , Deborah Morin, a software consul- , he had a thriving chain of 10 stores. heir very first date, Mackey couldn't t peeking into Deborah's refrigerator. his delight, he discovered a vegetari- paradise. Now out of the software ness, Deborah teaches yoga and s care of the couple's home and h. She's an ardent environmentalist, e rider, and Sufi, a follower of a mys-

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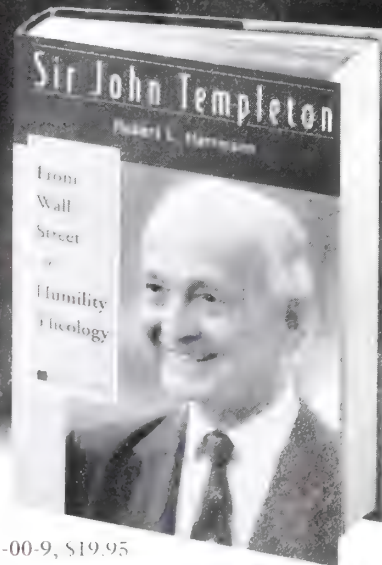
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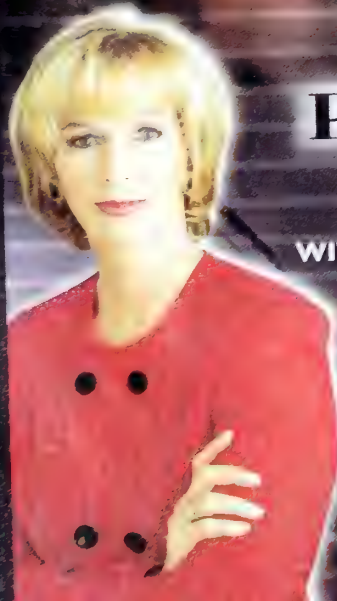
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sect of Islam. On weekends, the hang out at their 680-acre ranch in Austin, allowing Mackey to dip into a collection of dozens of books ranging from history to sci-fi.

away from his tranquil home life, Mackey's sometimes-clashing business and personal philosophies have made him a target of enemies. To the dismay of the orthodox organic crowd, Mackey has also offered conventionally grown food for sale. But Mackey's fiercest enemies have been the unions, who claim he offered inadequate pensions and health benefits. They've picketed his stores for

Mackey launched a splashy store in rival Wild Oats's hometown—and cut prices 20%

stores in California and elsewhere, inflicting at least temporary damage to sales and profits. "They're not trying to outsize Whole Foods. They're trying to destroy us," says Mackey.

AGE NONSENSE? Hogwash, insists Denier, assistant to the president of United Food & Commercial Workers International Union, who says Mackey tried to squash union activities through "threats, intimidation, and fear." Denier: "What we're doing out in front of those stores is telling people it isn't what it's cracked up to be. This new Age nonsense."

Indeed, there's nothing New Age about Mackey's old-fashioned quest to outpace his industry. Rival Wild Oats learned that lesson the hard way when they opened a splashy new store and reduced prices by 20% early this year in Boulder, Colo., Wild Oats's hometown. The move came in retaliation for the closing of Wild Oats stores in some of Whole Foods's markets.

To drive home the point, after Whole Foods opened the Boulder store, Mackey Wild Oats CEO Michael C. Gilliland wrote a game of Risk, with a note reading "warned is forearmed." Gilliland concedes sales have fallen 10% to 20% with Whole Foods's entry but says they're coming back. In the end, he says, the growing market for natural foods is enough for both players. But for peace and love go only so far. "If you want to win, you can't let your opponent gain an edge on you," he says. "You're like a true capitalist."

By Wendy Zellner in Dallas

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CROSSOVER DREAMS

George W. Bush (right), with Jeb, won Texas with broad minority support: "One cannot lead without uniting"

servatism and partisanship that have left many Capitol Hill Republicans out of synch with swing voters. Failure, many pols fear, could cost the party both its congressional majority and the White House in 2000.

For the GOP's 31 governors, the road ahead is clear: The door needs to be opened wider to minorities and working women. And such popular issues as schools, tax cuts, and economic

development should top the agenda. Says Pennsylvania Governor Tom Ridge: "We need to become the face of the Republican Party."

LOWER KEY. Republicans have spent years in unrequited yearning for a more conservative to be the heir to Ronald Reagan. Now, by downplaying polarizing national issues such as curbs on abortion and immigration, they seem to be searching for a low-keyed problem solver who can build bipartisan coalitions—a sentiment that helps explain the Presidential boomlet of Texas Governor George W. Bush.

"The age of soaring rhetoric and grand vision is over," says Rich Galardi, executive director of GOPAC, a conservative fund-raising group allied with outgoing House Speaker Newt Gingrich. "What replaces it is competency—get the roads fixed, cut taxes, get government more efficient. What we need is a national mayor or governor."

Besides a shift in emphasis from macro to micro solutions, Republican

REPUBLICANS

THE GOVERNORS TRY TO TAKE CHARGE

Can they make the GOP the party of pragmatism before 2000?

To understand just how shaken Republicans are after their Nov. 3 humbling at the polls, listen to Clark Reed, former chairman of the Mississippi GOP. "I'm a right-winger," he says softly. "But it's time for all these [social] conservatives to be quiet, or we'll never elect a President again."

Coming from the patriarch of modern Southern conservatism, it's a telling comment. And Reed is hardly the only

party elder voicing such views. With a swiftness that has stunned the GOP faithful, Republican power brokers are concluding that it's time for a new image and a more engaging message. The buzzword is pragmatism—at least the kind practiced by the GOP's popular crop of statehouse officials. The consensus at a Nov. 17-21 conclave of GOP governors and grass-roots leaders in New Orleans: It's time to mute the tough social con-

STATEHOUSE GANG

GEORGE W. BUSH Bush just led the GOP to a sweep of statewide offices with his "compassionate conservatism," which stresses education and family responsibility. Most impressive, he got 49% of the Hispanic vote and over 20% of the black vote.

TOM RIDGE The Pennsylvania governor racked up the biggest reelection margin of any Republican in state history. A blunt ex-Marine, he

The GOP has no shortage of governors with national ambitions

appeals to both blue-collar ethnics and suburbanites. But can right-wingers accept his pro-choice stand?

GEORGE PATAKI After cruising to a second term as New York's governor, he is being urged by fellow moderates to test the White House waters.

TOMMY THOMPSON The plain-spoken Wisconsin governor has a record of bipartisan problem-solving and landslide victories. He led the

welfare-reform revolution, and he's prominent free-trade advocate.

FRANK KEATING The Oklahoma governor is an ex-FBI agent who gets things done, from fighting crime to building roads. The abortion foe is popular with conservatives.

JOHN ENGLER The three-term Michigan governor has overhauled the tax code and welfare system. And he's an education innovator.

strategists say the GOP must broaden its base. "The message is tolerance," says Connecticut Governor John G. Rowland. "We're against gays, women's rights, affirmative action, immigration, unions, teachers. Until we stop this, we're never going to win."

In California, social conservatives riled minorities by battling affirmative action, unequal education, and health benefits for immigrants. With the Hispanic population growing rapidly in California, New York, Texas, Illinois, and Florida, GOP media consultant Mike Murphy warns that Republicans face "a looming crisis" in the Electoral College. Unless it defused, he says, "the big states are going to be unattainable in 20 years." The new model may be Bush, who courted Hispanic votes and won broad support among minorities by pledging an aggressive program to improve reading skills. Brother Jeb also reached out when he won the governorship of Florida. Unlike Washington hard-liners, George W. Bush opposes both affirmative-action limits and strict English-only dictates. "One cannot lead without uniting," Bush told *BUSINESS WEEK*. "The politics of division have been divisive."

IGNORED. Governors such as Bush hope the election will jolt party leaders into a new course. But will they? After the '94 GOP sweep, Hill Republicans promised to give the gobs a key policymaking role. "Instead, they treated us as if we were a special interest," says Wisconsin Governor Tommy G. Thompson. "We spent years in the wilderness." Washington Republicans are paying more attention now. Senate Majority Leader Trent Lott (R-Miss.) has invited all governors to a Dec. 4 strategy session. And there is talk about making governors the sales force for party initiatives. But GOP topsiders such as House Speaker Richard K. Armey, the House Majority Leader, and Tom DeLay, the House Whip, don't have much of a role for Bush-style deal-cutting. They prefer partisan shootouts.

Besides, the Religious Right is skeptical of a shift toward accommodation. Public Policy Research Council President Gary L. Bauer warns that a retreat on social issues will cost Republicans crucial support in the 2000 elections. He has a key associate: "You could have a rebellion in the ranks."

What's notable about the current searching is just how isolated Bauer and his ilk are from the repositioning effort. Right now, many Republicans are worried about a return to minority status that they're ready to get in line, roll up their sleeves, close their eyes—and get a big injection of pragmatism.

by Lee Walczak and Richard S. Tedlow in New Orleans

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see page 146

WHEN IS A TEMP NOT A TEMP?

New rulings may up companies' hiring costs

Ever since the mid-1980s, companies have rushed to outsource millions of jobs, filling them with temporary workers and self-employed independent contractors. But what began as temp work often has turned into multiyear employment, as companies got hooked on the flexibility and lower labor costs that temps provide.

Now, Corporate America's love affair with contingent workers is running into trouble. The concept of "permatemps" has been hauled into court, most prominently in a suit against Microsoft Corp. and another recently filed by the Labor Dept. against Time Warner Inc. The central question: Who is the real employer of someone who management says is contingent but who remains on the job long term? If it's the company, federal pension law could require it to provide that person benefits, including payments for missed back years, as the courts ruled in the Microsoft case (page 92).

The legal issues at stake are still in flux. But if judges continue to side with permatemps, it could trigger costly suits for a wide range of employers that rely on temp agencies and force big changes in the way they employ temps and contractors. "Any company with any sense is going to be aware of these [new legal questions] and is talking to counsel about the potential liabilities," says Ed Lenz, general counsel of the National Association of Temporary & Staffing Services.

The problem is that labor laws weren't written to cover temps who

aren't temporary. For workers who switch jobs frequently, it's usually clear that a temp agency employs them—or, if they are independent contractors, that they are self-employed. But it's muddier for permatemps, whose ranks have swollen in the 1990s. Some 29% of workers employed by temp agencies remain on the same job assignment for a year or more, according to the Bureau of Labor Statistics (chart).

The question of who is the primary employer first arose at the Internal Revenue Service. In the early 1990s, it found that many companies were misclassifying employees as independent contractors and not paying payroll taxes on their behalf. An IRS complaint at Microsoft on this issue led to the current lawsuit, filed in 1992. The claim: Many of Microsoft's 6,000 or so temps really are common-law employees of the company. Under the Employee Retirement Income Security Act of 1974 (ERISA), the federal pension law, they would be entitled to benefits that other employees get unless the company's benefit plan specifically excludes them.

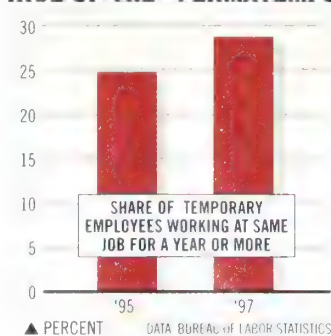
The U.S. Court of Appeals for the

Ninth Circuit upheld this view last year and the Supreme Court denied review in January, 1998. On Nov. 17, plaintiffs filed a new suit for thousands of workers who were removed from the original ruling this summer, when the district judge restricted the case to several hundred independent contractors who had worked at Microsoft prior to 1990. "If you really look at what's going on (with the new suit), it appears as if they're saying there's no good reason to have temporary workers at all," complains Sharon Decler, Microsoft's director of contingent staffing.

Microsoft's setbacks have prompted many companies to revisit their policies, say management lawyers. But with the law in a state of uncertainty, company options aren't clear. One course for an employer to amend its benefit plans to exclude explicitly some workers, such as those on outside payrolls. Still, temps who could prove they were common-law employees could sue for benefits they didn't get before the pr



RISE OF THE "PERMATEMPS"



the federal pension law, they would be entitled to benefits that other employees get unless the company's benefit plan specifically excludes them.

The U.S. Court of Appeals for the

The courts say some of Microsoft's 6,000 temps are really common-law employees, making them eligible for benefits

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A WORLD OF ENERGY.

The Workplace

change, says Frederic S. Singerman, an ERISA lawyer in Washington, D.C.

Employers can also take steps to ensure that a court won't find permatemps to be common-law employees. But that may require them to surrender considerable managerial control over long-term temps. Consider San Francisco's Pacific Gas & Electric Co. On Oct. 20, the utility lost a case on appeal when the court ruled that a dozen employees outsourced in 1983 could collect benefits by proving they were common-law employees. Even before the suit was filed, PG&E took steps to make sure its temps were treated differently from other employees. Now, temps aren't supervised by PG&E managers or listed in the employee directory, and they can't use PG&E cars, business cards, or stationery. "You really have to give up direct control to make sure your temps aren't common-law employees," says PG&E staff attorney Maureen Fries.

BIG IMPACT. PG&E isn't the only company facing the prospect of managing its temporary workforce in new, careful ways. In July, Allstate Insurance Co. got hit with a class action claiming that 10,000 temps hired since 1983 were common-law workers. The complaint claims that Allstate controls their hiring, firing, training, and day-to-day management. If the plaintiffs prevail, Allstate may have to give up some of these functions. Allstate lawyer Greg Rohlfing says that, because the company's benefit plans exclude these workers, the claims are meritless.

The Time Warner suit has introduced another issue: government enforcement. While other permatemp cases have been brought by private plaintiff lawyers, Time Warner was slapped on Oct. 26 with a Labor Dept. suit citing violations of the ERISA rights of hundreds of freelance photographers and journalists. The agency had been in heated negotiations with Time Warner for two years and filed suit after failing to reach a resolution. Benefits lawyers say if Labor prevails, it may spur a flood of permatemps seeking help from the government.

Microsoft's Decker worries that the new spate of permatemp lawsuits could undo what many see as a mutually beneficial work arrangement. The suits "could take away opportunities for some people, like women who want to take time off," she says. They also "could totally change the way a lot of companies staff their businesses." Indeed, for the many companies that have made contingent workers part of their human resource strategy, the benefits of a more flexible workforce may turn out to carry a steep price.

By Aaron Bernstein in Washington



COURTNEY: "[Temps] have no economic rights like other workers"

HIGH TECH

PROGRAMMERS OF THE WORLD...

An effort by Microsoft temps to unionize faces big odds

In mid-November, Marcus Courtney camped out at a Seattle bus stop, handing out leaflets to riders headed for Microsoft Corp.'s sprawling headquarters in the suburb of Redmond. His quixotic mission: to persuade the 6,000 programmers and technical writers who work for the software giant as "temps" to join a labor union.

Courtney is a founder of a group called the Washington Alliance of Technology Workers (WashTech). It was formed last spring by a few dozen disgruntled Microsoft temps angry at what they see as their second-class treatment (table, page 94). In August, WashTech affiliated with the 600,000-member Communications Workers of America (CWA). WashTech says that 900 software workers, mostly at Microsoft but also at Boeing, Amazon.com, and other Seattle high-tech companies, have signed up for its E-mail newsletter. (There's no print ver-

sion.) The group began accepting dues paying members in October, but doesn't expect many joiners until it gets an online registration system up and running.

WashTech would appear to be tilting at windmills. Microsoft may be preoccupied with its antitrust suit right now, but the \$15 billion colossus has plenty of resources to battle a union drive. And even many WashTech members say they like their jobs, if not their treatment. Still, if the effort succeeds, it will mark a watershed for the largely union-free computer industry and for the U.S. labor movement. For more than a decade, union leaders have been trying with little luck to gain a foothold not just among computer workers but also among high-tech and white-collar professionals in general. Triumph at Microsoft would encourage other unions in their recruitment efforts, say labor leaders.

WashTech is also cutting new ground

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The Workplace

among temps and independent contractors, who now constitute 10% of the U.S. workforce. Unions have made little headway with these workers, professional or blue-collar, largely because they hop from company to company. But big companies like Microsoft have provided unions an opening by keeping their temps on long term, often for years. Unionization efforts could gain from the murky legal status of these "permatemps," which is beginning to cause headaches for employers and the temp industry alike (page 90). Says Courtney, who in August quit Microsoft after nearly two years as a temporary software test engineer to organize for WashTech: "We're employed indefinitely through temp agencies and have no economic rights like other workers."

Indeed, Microsoft's hiring policies helped to spur its temp workers to organize. The company employs more than 6,000 people through temporary agencies and as independent contractors. Roughly one-third of temps have been on the job for a year or more, the company says. Yet these employees are excluded from the generous benefits and fat stock options that Microsoft's 19,000 "regular" U.S. workers get. Microsoft is now battling a class action by temps who argue that they are legal employees of the company and entitled to benefits. Sharon Decker, Microsoft's director of contingent staffing, says many temps like the flexibility their jobs allow.

OVERTIME TIFF. The immediate spark for WashTech came last fall, when a software industry group that includes Microsoft supported a move by the state Labor & Industries Dept. to exempt some software professionals from state overtime laws. Some 750 outraged software workers E-mailed protests to the agency, but it changed the policy anyway. Courtney and other Microsoft workers then got the 750 names from the agency's public E-mail list and contacted them to form WashTech.

WashTech doesn't intend to be a conventional union. It won't hold a federally supervised unionization election, in part because permatemps' status is unclear under labor law. Down the road, WashTech may try to force Microsoft to recognize it as a union without a formal election—a tactic the CWA has used with mobile-phone and other workers. But for now, WashTech hopes to build a membership group whose sheer numbers

will force Microsoft to pay attention.

WashTech's initial goal is to give high-tech workers a voice for their concerns. At Microsoft, that means getting better treatment for permatemps. They say they do the same jobs as regular employees and work side by side with them in the same work groups. Yet Microsoft will only employ them if they agree to become independent contractors or sign up with a temp agency—and forgo benefits, say these temps. Microsoft's Decker says the company has 3,000 regular jobs open at any given time and "anyone who wants to work at Mi-



WHY SOME MICROSOFT TEMPS ARE THINKING UNION

A group called WashTech is trying to unionize Microsoft's 6,000 temporary employees and independent contractors.

Some of their complaints:

HIRING Microsoft managers agree to hire people, then ask them to sign up as employees of a temp agency.

PERMATEMPS About a third of Microsoft temps have worked there for more than a year, but they're not made regular employees.

BENEFITS Temps often do the same work as regular employees but receive no benefits or stock options from Microsoft.

STATUS Temps say they feel like second-class citizens, which is underscored by their orange badges vs. blue ones for regular employees. Temps can't go to company picnics or parties, use Microsoft sports fields, or play on company teams.

crosoft can come and apply."

Still, some permatemps say they see the agency relationship as a sham that allows Microsoft to deprive them of benefits. One temp, who declined to be named, says she found a job as a technical editor at Microsoft in 1995 and has been there full-time ever since. She was told to sign up with S&T Onsite, a unit of Seattle-based Sakson & Taylor Inc. She pays about half the cost of the health and dental benefits S&T offers, much more than what regular Microsoft workers pay. And she doesn't get Microsoft's paid vacation, sick days, and holidays, or its stock options. S&T strategy manager Eric Sonett agrees that S&T's benefits are inferior to Microsoft's. Decker says Microsoft is urging agencies to look at

their benefit plans to make sure they're competitive.

Other permatemps maintain that temp agencies are simply third parties that do little for them. So says Miriam Harline, who has been a Microsoft technical editor on and off for seven years. She got her first job through an agency and had personal relations there, so she didn't mind being on its payroll. But when Harline found a job in a different Microsoft unit in 1996, her manager said she had to switch to S&T even though she didn't find her the job. Sonett concedes that a majority of the 500 temps it has at Microsoft found their own jobs. Decker says Microsoft asks managers to refer candidates to agencies.

S&T then dragged its feet, Harline claims, when her new Microsoft manager agreed to let her should get a raise. Harline got so fed up that she formed a company with her husband, and left at Microsoft, and both became independent contractors, still doing the same jobs. Then she joined WashTech. "I resent this whole agency shell game," says Harline. "I don't know anyone that they don't speak for me, and if I want a raise, they don't even want to help." Sonett, however, says that "it would be senseless for us to do anything to harm our relations" with employees.

In July, Microsoft told temp agencies that agency managers would henceforth be expected to do performance reviews of their employees and use them to determine pay hikes. "But the Microsoft manager has day-in, day control over me. I need

to talk to anyone from the agency, and they have no clue what I'm saying," says the editor. "The agency will just rubber-stamp what the manager says." Sonett agrees that S&T relies heavily on "client feedback" to do reviews.

Decker says Microsoft is encouraging agencies to communicate more with temps.

The odds against WashTech making headway at Microsoft seem high. If it manages to get the software giant to turn more permatemps into regular employees, it could mean millions in added benefits for the company in added benefits—a prominent foothold for unions in the high-tech economy.

By Aaron Bernstein in Washington



Shell Canada discovered a great resource for putting a cap on IT costs.

Managing resources is what Shell Canada is all about. So when IT costs reached unacceptable levels — over \$100 million annually — Shell decided it was time to do something about it.

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FIBER OPTICS

THROUGH A GLASS QUICKLY

Advances in optical fiber are revolutionizing telecom

Everyone knows about the Silicon Revolution. But what about glass, the foundation of the coming optics epoch? Invisible to most people, a web of lightning-fast optical fibers already encases the modern world. Today, these hair-thin glass strands handle most long-distance phone traffic and some local traffic in cities—and they'll soon begin arriving at nearly everyone's front door. A single laser beam pulsing through these fibers can transmit thousands of simultaneous voice conversations, or millions of bits of digital data, every second.

That's a lot—but not nearly enough. Ever since Internet traffic began to boom and the television business decided to go digital, computer companies and online services have been warning that tremendous increases in our ability to deliver information—voice, video, and data—will be needed. Worldwide demand just for Internet capacity is projected to surge 4,600% by 2002.

FANCY PRISMS. Fortunately, a stunning advance in fiber-optic technology is now pumping up the available capacity to levels that could revolutionize telecommunications. The technology is dubbed wavelength division multiplexing, or WDM. But you can think of it as a



ON THE BEAM: Bell Labs' Glass sees stupendous hikes in data speed

rainbow. With WDM, the light streaming through fibers consists of many colors—although all are in the invisible infrared spectrum. Each hue stretches from end to end of a glass strand and can carry its own stream of data. Thus, WDM makes it possible to greatly multiply the amount of data flowing through one fiber.

Despite the fibers' slender width, optical engineers are developing fancy prisms that can split infrared light into an ever-growing number of colors—just as silicon engineers

keep increasing the number of transistors on chips. In 1995, WDM made debut as a rainbow of just eight colors. Today, commercial WDM systems with 40 hues are available.

Last spring, researchers at Luce Technologies Inc.'s Bell Laboratory stuffed 100 beams into a fiber—a jacked up the data rate of each laser to 10 gigabits (10 billion bits) per second, four times today's usual drumbeat. That means the total throughput from the single glass strand was an amazing trillion bits per second. That's more than

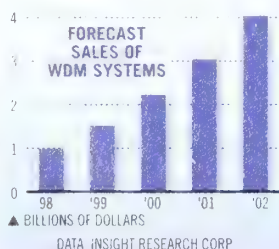
enough to accommodate all of North America's telecom needs. Bell Labs expects this technology will be on the market by 2000. With such enormous capacity, Hollywood could deliver movies to theaters in the blink of an eye. Product development could be greatly accelerated because engineers could instantly access huge three-dimensional models of components and manufacturing operations.

"MIND-BOGGLING." And a trillion bits (one terabit) per fiber is just a starters. Alastair Glass, head of photonics research at Bell Labs, envisions lasers pulsing 40 gigabits a second and optical fibers crammed with hundreds, even thousands, of WDM beams. Ultimately, each wispy fiber may transmit close to an incredible 200 terabits per second. That's enough to deliver the entire contents of the Library of Congress every single second. "It's mind-boggling," says Glass.

The numbers grow more extraordinary when you consider that fiber-optic cables used as so-called trunk lines to link cities and span oceans hold as many as 432 fibers. So even with today's commercial WDM technology—40 beams each pumping at 2.5 gigabits per second—fiber cables can carry tens to hundreds of terabits per second. Next year, says Glass, 80 WDM beams could become common, each one beating at 10 gigabits, and 160 beams are on the horizon.

That's the magic of WDM. Once fiber is in the ground, its capacity can be multiplied just by upgrading the eo-

SOARING INTERNET USE WILL SPUR WDM SALES





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tronics at both ends. The WDM electronics package isn't cheap, at roughly \$30,000 per fiber at each end, but that's a pittance compared to the cost of digging up the ground to lay new cable.

When Denver-based Qwest Communications International Inc. began laying 96-strand optical cables along railway lines in 1996, each fiber was designed to carry eight WDM channels. But the technology is advancing so fast that most sections have already been upgraded to 16 channels, doubling the initial capacity. If customers demand still more, Qwest

infrared rainbows inside optical fibers, it's a bonanza. Sales of WDM gear are projected to more than quadruple, to \$4 billion, by 2002, according to Insight Research Corp. in Parsippany, N.J. (chart, page 96). "It looks like another California gold rush," says Insight President Robert Rosenberg. All the telecom-tech heavyweights—such as Ericsson, Northern Telecom, and Pirelli Cable—are rushing to stake claims with their own WDM technology.

CAPACITY KEEPS ON DOUBLING

1995 An optical technology called wavelength-division multiplexing pumps data at 20 gigabits per second—using eight-color rainbows and 2.5-gigabit laser pulses in each color.

1996 WDM unleashes 16-color bands, doubling throughput.

1997 40-color rainbows go commercial, as do 10-gigabit lasers—for single-fiber outputs of up to 400 gigabits a second.

1998 80-band systems announced and should be installed next year. 160-color fibers and terabit speeds due by 2000.

can quickly double capacity again by adding more WDM lasers. And if that's still not enough, Qwest may be able to quadruple capacity with faster lasers.

In a chase after Qwest, similar trunk networks are being built by IXC Communications, Level 3 Communications, and Williams Communications. By 2000, these four companies will have planted 50% more miles of fiber-optic cable than the 41,000 miles operated by AT&T. And other companies are laying still more new fiber—such as NorthEast Optic-Network Inc., which is installing 600 miles along the East Coast corridor.

Now, the WDM race is spreading around the globe. In Europe, Britain's Cable & Wireless Communications began upgrading its existing fiber networks in 1997, using the 16-wavelength WDM systems that Ciena has been supplying to Sprint since 1996. Since August, 1997, China has been buying WDM systems from Lucent and more recently, Japan's NEC. And Alcatel and Fujitsu Ltd. are about to construct an 18,000-mile under-sea WDM cable looping from Australia and New Zealand to the U.S., then back through Hawaii and Fiji to Australia.

In short, the world is getting wired as never before. For the suppliers of the exotic equipment that creates the

So much additional capacity will be coming onstream that some analysts wonder what the world will do with it all. Not even the enormous appetite of Internet traffic, which will surpass the volume of voice calls any day now, will eat it all. The looming glut heralds good tidings for every company that has a phone line, predicts Rosenberg of Insight Research. "Everybody's going to see a big drop in communications costs," he says. Indeed, Wall Street analysts are beginning to worry about a major shakeout in the telecom industry.

BABE IN ARMS. That might be a short-term danger, but Harry Bosco, chief operating officer of Lucent's optical networking business, isn't concerned. The dynamics of ever cheaper bandwidth, he predicts, will spur innovations that will far outstrip what the spread of PCs has brought. "As cost comes down, it's going to constantly drive up demand by creating new opportunities," he says.

Bosco envisions a day when every manufacturer and department store has a separate high-speed WDM channel that's continuously open to each supplier. Bandwidth might become so cheap that every PC and home could also have its own open line to the Internet. So-

called "metropolitan" WDM systems designed for short-haul links are now starting to show up in cities, he notes, and plug-in optical "cards" for local-area WDM networks are in the works at several telecom suppliers, including startup LightPath Technologies Inc. in Albuquerque and Eagle Optoelectronics Inc. in Boulder, Colo.

The WDM revolution is still such a babe in arms, and is advancing so slowly, that most businesses haven't begun to grapple with the notion of an open world in which bandwidth is essentially unlimited and is practically free. Eric Glass of Bell Laboratories has to scratch his head in amazement at the phenomenal progress. WDM technology is actually outrunning silicon's advances, he says. If it weren't for IBM's breakthrough silicon-germanium material, a hybrid semiconductor that produces far faster chips than ordinary silicon, the telecom companies that do traffic-cop duty couldn't come Keystone Kops. "Silicon isn't keeping up," says Glass, because light has unlimited bandwidth. "Paradigm shift" is a much overused term, he adds, but certainly applies to what's happening on this side of WDM's magic rainbow.

By Otis Port in New York



Bandwidth could become so cheap that every home could have its own open line to the Internet

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ELLEN LICKING

CELL A W MACHINE

ING CELLS ARE FANTASTICALLY efficient factories, constantly procuring chemicals in their environment and assembling them into complex proteins. They even control minuscule molecular pumps and motors to transport materials in, out, and around the cell. Scientists would like to intervene in these processes and direct them toward delicate and specific engineering goals—such as delivering toxins to cancer cells or monitoring microbial threats to crops.

Now, researchers are taking the first small steps toward such interventions. Carlo Montemagno, an assistant professor of biological



DESIGNED: The pump that Montemagno manipulates

engineering at Cornell University, says he has modified the surface of a cellular pump to measure just 40 atoms at a time. This modification allows him to attach artificial components for controlling it. Drawing on the Foresight Conference on Molecular Nanotechnology in Santa Barbara, Calif., in mid-November, Montemagno described a blueprint for a hybrid cellular machine that engineers can turn on or off as they please. Such a device could be programmed to target renegade cancer cells, glue them on to them, and then wash them up with chemicals that would be too toxic to release into the general bloodstream. □

HOW TO FIND A LAND MINE IN FADING LIGHT

NEW FLUORESCENT COMPOUNDS DEVELOPED BY A RESEARCH group at Massachusetts Institute of Technology may soon be used to sniff out some of the estimated 120 million unexploded land mines hidden around the world. The polymers, which glow yellow, are described in the Nov. 25 issue of the *Journal of the American Chemical Society*. They are sensitive enough to detect extremely dilute trace vapors of TNT, which waft into the air directly above a buried land mine.

When these highly sophisticated chemical sensors bind to TNT, the polymers' fluorescent intensity decreases significantly. The binding of just one molecule of TNT is enough to cause a measurable dimming of the polymers. That means they can be used to detect TNT in concentrations as dilute as 10 to 100 parts per billion.

Timothy M. Swager, the lead author of the study, believes these novel polymers could be used in low-cost, handheld mine detectors. He is working with a Stillwater (Okla.)-based company called Nomadics Inc. to develop a prototype. In the future, the polymers, and the portable detection devices that will contain them, could also find a home at airport security checkpoints, alerting inspectors to hazardous chemicals, firearms, and drugs such as cocaine and heroin, all of which give off trace vapors. □



DRAWING A BEAD ON RECYCLABLES

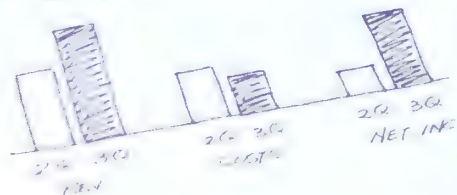
A NEW POINT-AND-SHOOT DEVICE CALLED THE RP-1 Polymer Identification System promises to cut down on the billions of pounds of plastic that are annually land-filled or incinerated because they can't be recycled until they're identified and meticulously sorted. The device, which looks like a laser-tag gun tethered to a desktop computer, was developed by engineers at Purdue University and is being marketed by West Lafayette (Ind.)-based SpectraCode. Visteon Automotive Systems, Ford Motor Co.'s automotive component operation, is using the device to pick out plastic components from junked cars, and Detroit recycling facilities are using it to sort other plastics such as dry-cleaning bags and shrink-wrap packaging.

The RP-1 works like a bar-code reader—only instead of magnetic lines, the instrument "reads" molecular structures in the plastic. Typically, the system takes less than a second to identify a piece of plastic. That means the RP-1 has the potential to sort through 500 tons of material a day. "It's a fabulous piece of equipment," says Tony J. Bruchs, Senior Recycled Materials Engineer at Visteon. □

INNOVATIONS

■ Stanford University neuroscientists are the first to show that there are differences in brain function between boys who have attention-deficit disorder and those who do not. The results, which were published in the Nov. 24 issue of the *Proceedings of the National Academy of Science*, may allow doctors to diagnose ADD based on brain activity, instead of relying on subjective observations of children's behavior. The Stanford group mapped the brain activities of 16 boys and found that the boys with ADD showed less activity in a region of the brain called the basal ganglion than normal boys. But when the boys with ADD took Ritalin—the most commonly prescribed drug for the disorder—activity in this region of the brain increased. With improved diagnostics, doctors may be able to limit their prescribing of Ritalin to those patients who would actually benefit from it.

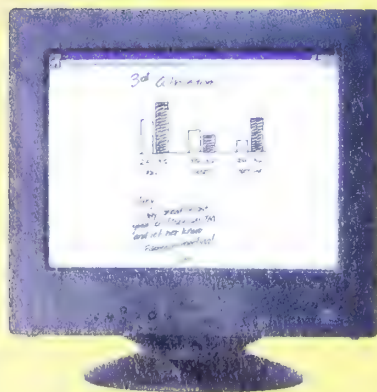
■ After a hugely profitable 15-year run, Novartis Pharmaceuticals Corp. has lost its lock on the lifesaving transplant medication cyclosporine, worth an estimated \$1.3 billion in yearly worldwide sales. In early November, the Food and Drug Administration granted Sangstat Medical Corp., a small biotechnology company based in Menlo Park, Calif., approval to market SangCya, a generic version of the Novartis drug Neoral. The drugs are used to suppress patients' immune responses to help prevent organ rejection. SangCya, which the FDA has approved as therapeutically equivalent to Neoral, will cost 20% less—which could mean savings of as much as \$1,200 dollars a year per patient, and up to \$100 million a year for health-care payers. □



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SEMICONDUCTORS

WHO SAYS INTEL'S CHIPS ARE DOWN?

Its three-tier strategy keeps sales afloat in an off year

analysts expect Intel's earnings to fall 16% this year, the company's first annual decline in a decade, on revenues that are up just 4%. But experts had been fretting it would be a lot worse.

What saved Intel's bacon was a new strategy it launched in the fall of 1997. Barrett and his mentor, Chairman Andrew S. Grove, decided 18 months ago to segment Intel's product line into chips aimed at specific markets, such as cheap PCs, mid-tier "performance" PCs, and powerful corporate servers. That let Intel balance thin profits from prod-

ucts like the Celerons, which sell for as little as \$86, with cash cows like the Pentium II Xeon workstation and server chips, which cost up to \$2,000. The combination helped Intel hold its average selling price nearly flat for the last five quarters, at around \$210. "Were it not for a timely switch to a segmentation strategy, Intel would be facing an abyss," says analyst Drew Peck of SG Cowen.

NO CHANCES. The balancing act, though, is not without risk. Analysts expect Xeon-class chips used in corporate workstations and servers to pump \$1.8 billion into Intel's bottom line in 1999—22% of its total profits, and more than three-quarters of expected profit growth. The only problem: High-end chip sales could evaporate if the global economy tanks further or if corporate buyers worried

ROSIER PICTURE

Now, CEO Barrett can balance thin profits from Intel's cheap Celeron chips with those from its costly server chips



In early November, during his annual trip to China, Intel Corp. Chief Executive Craig R. Barrett attended an Intel-sponsored computer street fair in the city of Chengdu—one of the marketing programs the chipmaker uses to push personal computers where retail outlets are still in short supply. More than 100,000 people showed up, cleaning out the mom-and-pop computer makers who hawked stacks of home-built Pentium II PCs on creaking sidewalk stands. Many buyers lugged their computers home lashed to the backs of bicycles. Even Barrett,

who coolly presides over Intel's \$26 billion chip empire, says he was "truly amazed."

Equally amazing: Those eager buyers weren't snapping up bargain machines made with Intel's inexpensive Celeron chip. Instead, they were clamoring for PCs built on the more powerful, and profitable, Pentium II. Good thing for Intel. In a year when average PC prices dropped 7.3%—setting the stage for Intel's juicy profit margins to get whacked—Intel has managed to stay above water thanks to strong sales of its priciest chips. True,

about the Year 2000 bug freeze their PC purchases next year.

A shaky economy also could drive more consumers to cheap PCs. That would force Intel to slug it out with low-price rival chips made by Advanced Micro Devices Inc. and National Semiconductor Corp. Intel was late to address that fast-growing segment, and despite gains made with the Celeron processors, it still has less than 30% market share in sub-\$1,000 PCs sold through U.S. retail stores, says researcher PC Data Inc. "Is pricing pressure still a risk? Definitely," says analyst Erika Klauer of BT Alex. Brown. "Is



the economy still a risk? Absolutely."

Barrett dismisses the notion that Intel is more vulnerable to an economic downturn than it has been in the past. "I'm not sure that's a valid concern," he says. "We're not further out on the edge or suffering fear of falling from great heights." Still, the company isn't taking any chances. It is mounting an unprecedented cost-cutting program to keep profits on track in 1999. "We will increasingly put emphasis on the cost side," Grove told Wall Street analysts on Nov. 13. The message analysts took away: After a decade of go-go growth when the chipmaker could set its prices and watch profits roll in, "Intel is now more like everybody else," says SG Cowen's Peck.

Fortunately for Intel, the picture is looking rosier. Despite earlier warnings that its fourth quarter might be flat, the company surprised Wall Street on Nov. 9 by forecasting 8% to 10% sequential revenue growth, to around \$7.3 billion, thanks to unexpectedly strong PC demand. Better yet, Intel's gross margins will rise two percentage points, to 55%, well within its historic profit levels. NationsBanc Montgomery Securities Inc. analyst Jonathan J. Joseph predicts those margins will increase slightly next year, pushing Intel's profits to a record \$8.2 billion, on revenues of \$33 billion.

The nascent turnaround is welcome news to shareholders. After watching Intel's stock fall 32%, to 65 $\frac{1}{2}$ %, from February to June, they've pushed it back up to over 115, a record. Indeed, Intel's upbeat finish to the year has belied skeptics who warned that collapsing PC prices signaled the end of Intel's money machine. But to adapt to a changing world, Intel is scrutinizing every expense. "We put very aggressive spending targets on everybody," Barrett says.

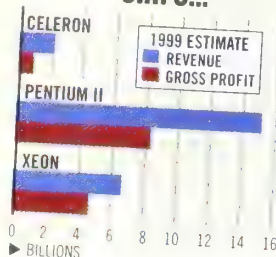
RECYCLING. Intel has already curtailed travel spending, in part by using more videoconferencing. Head count will be reduced this year by 3,000, to about 61,000 people, through attrition and layoffs across the business. And it's urging customers to place their orders over the Internet, which reduces processing expenses and improves productivity. Already, the company books about \$1 billion in orders per month over the Net,

though it hasn't disclosed how much that saves. All told, these and other measures could chop expenses by \$45 million in 1999, analysts estimate.

Intel is looking for even bigger savings in production costs. It is accelerating by six months, to mid-1999, its move to next-generation chip manufacturing technology: Shrinking the width of circuits on chips from 0.25 microns—about one-fourth-hundredths of the thickness of a human hair—to just 0.18 microns. That lets Intel make 75% more chips per silicon wafer, dramatically slashing its unit costs. And instead of buying all-new production gear, the company

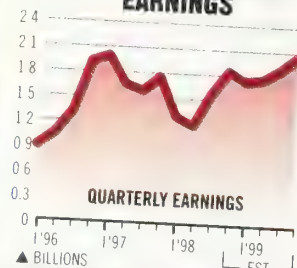
Inside Intel's Snapback

HIGH-MARGIN CHIPS...



DATA: FIRST CALL, COMPANY REPORTS, NATIONSBANC MONTGOMERY SECURITIES

...POWER STRONGER EARNINGS



plans to reuse 70% of its current equipment as it shifts to 0.18-micron widths. These and other moves should raise gross profits by more than \$1 billion in 1999.

All the cost savings won't help if Intel doesn't kick-start top-line growth. The entry-level Celeron chip, widely panned when it first arrived last April, was revamped in August and is starting to take off with PC makers such as IBM, Compaq, and Hewlett-Packard. Intel expects to double production this quarter, to 8 million units—more than the entire output of AMD, National, and a host of smaller competitors combined.

Intel is bent on getting an even bigger piece of the pie. It will roll out faster Celeron chips in the first half of 1999, and may discount older versions to as low as \$50—comparable to rivals' prices—estimates Linley Gwennap of chip researcher MicroDesign Resources. Intel Executive Vice-President Paul S. Otellini says Intel aims to claw back cheap PC business. "We're not willing to live with the share we have," he vows.

Even so, many analysts think Intel secretly wishes cheap PCs would go away. The chipmaker would rather consumers buy PCs built on more-profitable Pentium IIs, and it's those chips the company is heavily advertising on TV. Celeron chips, by contrast, get no TV spots and are promoted only via local newspaper ads on Fridays and Sunday. It's no wonder Intel pushes the Pentium II. Those chips will contribute 56% of the company's processor revenue this year—fueled by the fact that Pentium IIs are used in 97% of all PCs priced over \$1,500, according to researcher Dataquest Inc. Intel has no intention of losing that franchise: In 1999,

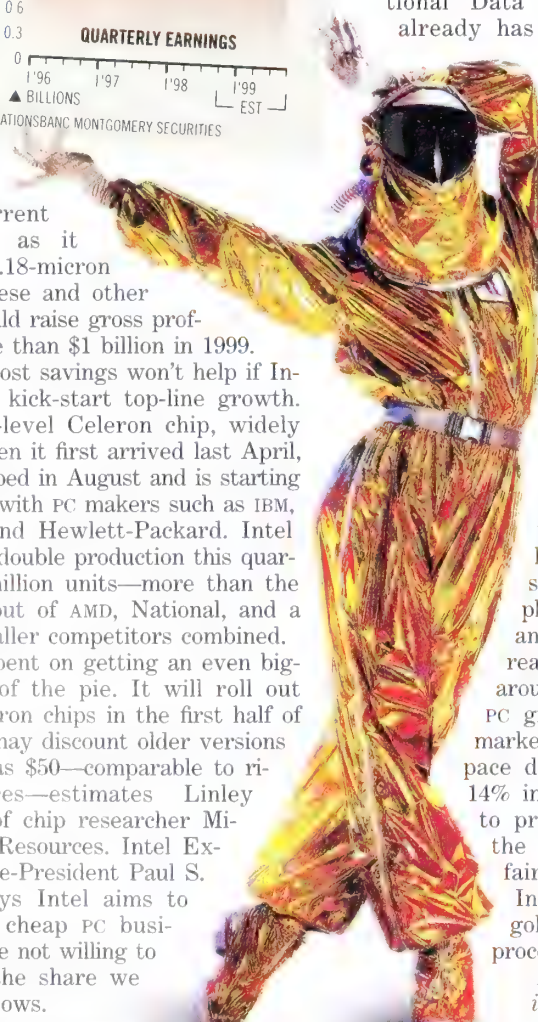
it will roll out zippier Pentium III chips that also include new features for speeding up 3-D graphics.

OVERSEAS OPENING. Intel's plans for Xeon are no less ambitious. The company will debut faster models, offering speeds of over 600 megahertz—throughout 1999, in a bid to continue gaining market share in servers and workstations. International Data Corp. says Intel

already has nearly 100% market share in server chips costing \$10,000 and below. By 2002, it will have captured a majority of servers priced up to \$100,000, according to IDC.

Then there's the global market. AMD and National have given up international market share to gain business in the high-profile U.S. market. That has opened the field to Intel, which has beefed up overseas marketing in places such as China and Latin America—reaping big sales gains around the globe. With PC growth in emerging markets expected to outpace domestic growth by 14% in 1999, Intel stands to profit handsomely. The Chengdu computer fair is any indication Intel still has a long gold to mine from processors.

By Andy Reinhold
in San Mateo, Calif.





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JAPAN

'THIS IS GOING TO HAPPEN'

MITI's Yosano pledges reform

It was once the undisputed prince of Japanese ministries. The planners at the Ministry of International Trade & Industry guided Japan's postwar resurgence, nurturing the auto industry, building critical mass in steel. But around 1980, the game changed, and MITI's great rival, the Ministry of Finance, seized the initiative in planning Japan's future. MOF convinced Japan's rulers that the country now had to focus on husbanding and allocating its vast wealth instead of targeting the next industry to dominate. Thus, MOF emerged as the top player in Kasumigaseki, the administrative quarter of Tokyo.

But Trade Minister Kaoru Yosano, MITI's new chief, now sees a chance to reassert his ministry's old dominance. In this season of fear, voters and legislators revile MOF as the architect of Japan's economic mess, and MOF's mandarins, normally arrogantly self-confident, seem hobbled by self-doubt.

SHIFTING CENTER. That's the kind of opening a seasoned Liberal Democratic Party player such as Yosano is too shrewd to ignore. In recent weeks, he has worked furiously to position MITI as the leader of a much needed restructuring in industry and the planner of Japan's rescue. He has also eagerly crossed swords with U.S. trade negotiators about export policies. It's unclear if Yosano is sincere about forcing Japan to take the painful steps needed to restore its economic health. But he sure is serious about turning MITI into the country's No. 1 power center.

Yosano is an unlikely character to act as an agent of change. Granted, he talks readily about Japan's need for a deregulation that, though painful, will get

large pockets of the domestic economy up to global standards. "Regardless of who ever cries for help, this is going to happen," he vows. Yet such gutsy talk was until recently quite out of sync for an LDP heavyweight of Yosano's standing and pedigree. He's the grandchild of famous Japanese poets Tekkan and Akiko Yosano. After graduating from Tokyo University with a law degree in 1963, he quickly caught the eye of party bigwig and future Premier Yasuhiro Nakasone, who brought him on as a senior staff member. Elected to the Diet in 1976, Yosano steadily moved up the ranks. Last year, as Prime Minister Ryutaro Hashimoto's Deputy Cabinet Minister, he supported MOF's policy goal of reining in the runaway budget deficit. As a result, he backed Hashimoto's ill-fated move to hike the consumption tax, which pushed Japan into recession in late 1997 and helped aggravate the banking crisis.

That disaster brought down the Hashimoto government—and apparently triggered an about-face in Yosano's

thinking. By the time the new Prime Minister, Keizo Obuchi, enlisted Yosano to run MITI last July, Yosano had morphed into a Keynesian apologist. To the utter horror of Finance Minister Kiichi Miyazawa, Yosano condemned MOF's fiscal conservatism and called for a massive round of public-works spending, government loans for cash-strapped



ABOUT-FACE Yosano backed the tax hike that brought down Hashimoto, whose fall turned the MITI chief into an apostle for economic incentives

YOSANO (LEFT) HAS REPLACED MIYAZAWA (BELOW) AS OBUCHI'S CHIEF CABINET VOICE ON ECONOMIC POLICY



MITI'S COMEBACK

ADVISING POLITICIANS

The ministry is providing policy directives to the LDP, pushing Prime Minister Obuchi to come up with new stimulus measures

BEATING UP ON THE MOF

It's attacking the Ministry of Finance's position on taxes and other fiscal measures now that MOF is badly weakened

BASHING AMERICANS

At APEC, MITI negotiators derailed U.S. efforts for new free-trade initiatives and asserted Japanese primacy in Asian trade

DATA BUSINESS WEEK

loans to cash-strapped companies are squandered on politically motivated handouts, Miyazawa might get the last laugh. Indeed, the fear that Japan will do just that has already prompted Moody's Investors Service to strip the nation of its top-grade credit rating.

And Yosano still has not shown how MITI can pull off the restructuring and deregulation that Corporate Japan needs to revive. He is looking to create a European-style mix of job retraining and generous unemployment benefits to ease the pain of change. And he wants MITI to be a kind of massive McKinsey & Co. consulting firm to help instill best-business practices in the most uncompetitive sectors. MITI is moving toward opening sensitive sectors such as energy, retailing, inland transportation, and distribution to some tough deregulation that will hike Japan's jobless rate to Western levels. But serious deregulation and restructuring have yet to begin.

TRADE TANTRUM. Yosano can argue that he needs breathing room for the economy before tackling the hard stuff. He also wants to keep exports flowing at record levels to keep Japan's economic vital signs steady. America's ballooning trade deficit could well restart the trade war with Japan sometime next year, but Yosano is not ready to have Japan pull back.

Thus, Yosano banged heads with combative U.S. Trade Representative Charlene Barshefsky at the recent Asia-Pacific Economic Cooperation summit in Kuala Lumpur. There, Yosano and his aides insisted on excluding fishery and forestry products from a round of tariff reductions. It was part of a larger APEC free-trade accord covering nine industries that has been shelved for a year. Japan's combative stance steamed the U.S. negotiators, who suspect that Tokyo is using its crisis as an excuse to pump out exports and prop up trade barriers.

However Yosano's moves play out, there's no doubt he has done a superb job of getting MITI back into the game. What better way for MITI to ensure its survival than to position itself as Japan's central agent of change? The Obuchi government has pledged to downsize the sprawling central government once the current crisis passes. Some economists would like to see bureaucratic payrolls slashed by 50% early next century. A MITI cloaked in reformist clothing might stay intact—and a master strategist such as Yosano might emerge as the top dog in Kasumigaseki.

By Brian Bremner in Tokyo

companies, tax cuts, and other incentives to get the economy moving again.

Yosano also quickly marshaled the policy wonks at MITI to back his argument. MITI planners started to make a convincing case that the economy would incur a catastrophic plunge if the government didn't open the fiscal floodgates. According to one MITI document that circulated

has to consolidate his victory by proving that MITI knows best. He has staked his career—and MITI's comeback—on an all-or-nothing bet that Japan can make one final spending push to reflate the economy before its debt reaches unsustainable levels. If the billions set aside for high-tech public-works projects and government



JAPAN

SEGA: 'WE'RE GOING TO BLOW THEM OUT OF THE WATER'

But will its new game console really threaten Sony and Nintendo?

Shoichiro Irimajiri, president of game maker Sega Enterprises Ltd., thrives on risk. When he was at Honda Motor Co., he led the development of a revolutionary passenger car and later helped spearhead the charge into the U.S. Now, Irimajiri is making his biggest gamble, with the Nov. 27 Japanese launch of Dreamcast, Sega's new video game console. It's a cool machine, but it pits Sega against Sony Corp. and Nintendo Co., the gameland titans that turned Sega's Saturn console into an also-ran. Yet in assessing the odds, Irimajiri sounds as cocky as Sonic the Hedgehog, the Sega character who will continue his death-defying stunts in Dreamcast games. "I'm personally not used to losing fights," he says. "We're not really going to compete with Sony or Nintendo. We're going to blow them out of the water."

From a purely technical standpoint, such bravura may be justified. Driven by a 128-bit processor, Sega's \$250 Dreamcast has bullet-train speed and dazzling graphics that should appeal to Sega's core Japanese fans. Game writers love the depth and fluidity of the images they can achieve on its hardware. Says game designer Kenji Eno: "I finally can

create the kind of 3-D graphics I only dreamed about." Dreamcast will certainly get noticed in Japan and the U.S., where it debuts next September.

But technology alone is not enough. Four years ago, Sega introduced the state-of-the-art 32-bit Saturn, but then got trounced by Sony's slightly inferior PlayStation, also a 32-bit. Sony swamped stores with game titles and marketed its console much more effectively than Sega, whose \$2.3 billion in sales is dwarfed by Sony's \$50 billion. "Sega can get by with its core market," says Robert Burghart, an analyst with ING Barings in Tokyo. "The question is whether it can create a hit." Yet a hit is precisely what Sega needs. Pretax profits for the first half of fiscal 1998 tumbled 47%.

To improve Sega's chances, Irimajiri is taking lessons from Sony. Before launching PlayStation, Sony's game division wooed game developers with an impressive library of technical tools. So Irimajiri traveled around the world ask-

SONIC THE HEDGEHOG

Popular characters and great technology may not be enough

ing developers what they wanted to see in a next-generation console. The end result, he says, is a central processing unit that delivers three times the power of a PC and a graphics chip developed by NEC Corp. of Japan and VideoLogic Group of Britain that renders dazzling 3-D images. Sega is also introducing Internet capability, making it possible to play online games and handle E-mail.

"ARROGANT." Sega appears to have learned from the past, when it considered itself the gold standard. "Sega got arrogant," admits Irimajiri, recalling the Saturn fiasco. "They forgot about the customers, and the developers needed to make the technology a success." To get products quickly to Japanese stores, Irimajiri has cut out slow-moving middlemen and set up direct links to 5,000 retailers across Japan. He has also lined up more than 300 software developers, with two dozen games due for release in the next four months. Included are new versions of popular games like Sega's *Sonic Adventure* and *Virtua Fighter*.

But the launch is a huge effort for a company Sega's size. Marketing and development costs—including the expenses of the U.S. introduction—approach \$300 million. Complicating matters has been a delay in the delivery of NEC's graphic chip. Sega had hoped to sell 1 million Dreamcast consoles by the end of next March, but now figures it can

only make 1 million. For

Japan launch, Sega is cutting all it can to scrape together 100,000 machines, far short of the 500,000 it had promised.

Competition is certain to heat up. Sony and Nintendo have been lowering the price of their current consoles in anticipation of Dreamcast's arrival.

In the U.S., prices for Nintendo's N64 and Sony's PlayStation are expected to fall below \$100 next year. Nintendo is now working on a new version of N64, while Sony has dropped numerous hints about a 128-bit, digital videodisk-based PlayStation 2 in the pipeline due to hit stores in late 1999 or beyond. Maybe Sega needs two new games: *Nintendo Negator* and *Sony Smasher*. Then, surely, Dreamcast would be a hit.

By Irene M. Kunii in Tokyo



DREAMCAST HAS FAST 3-D IMAGES

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RUSSIA

THE HIGH COST OF EASY MONEY

Many Russian companies are now perilously in debt

Credit Suisse First Boston should have spotted the red flags when Russian oil company Tatneft asked for a short-term loan last February. Oil prices were sinking fast. Tatneft was already saddled with \$828 million in hard-currency debt, roughly equaling its 1997 export earnings. Worse, the company had admitted it was funneling loan money from foreign banks into the treasury of the Tatarstan regional government, which holds a controlling 32.4% stake in Tatneft. Even so, CSFB quickly approved a \$220 million

unsecured loan—one of many it offered Russian companies even as the country's finances deteriorated.

Now, Tatneft is buried under a pile of hard-currency debt and looking for a way out. After narrowly avoiding default in November on a \$300 million Eurobond, the country's fourth-largest oil producer is deep in talks with CSFB and other creditors to restructure about \$600 million in outstanding loans. Scores of other Russian companies are stuck in the same situation. Even if most creditors agree to restructuring, as seems likely, these com-

panies will struggle for years making repayments on loans they should never have received.

DRY WELL? Oil company Tatneft is restructuring \$600 million of troubled loans.

BLIND EYE. The saga of Tatneft illuminates how Russian companies embarked on a disastrous borrowing spree—partly prodded by foreign bankers—in the months before the country's economic collapse. Fooled by a slight uptick in Russia's economy, foreign bankers bent their own rules on credit risk in the rush to forge client relationships in 1997. Many turned a blind eye as borrowers invested loan proceeds in risky Russian bonds and squandered the money on shaky investments. With easy money flooding in, Russian borrowers didn't worry about how to repay loans. "There was so much credit, the companies began to believe that they didn't need to have well," says Stephen O'Sullivan, co-head of research at United Financial Group, a Moscow investment bank.

Indeed, the money kept coming even after Russia's stock and bond markets

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An IBM Company

"There was so much credit, the companies began to believe they didn't need to behave well," says one bank executive

nosived along with Asia's late last year. As weakening markets hampered their ability to raise capital, Russian companies increasingly turned to U.S., European, and Japanese banks. After boosting their foreign borrowing from \$1.5 billion to more than \$6.8 billion in 1997, the companies borrowed another \$5.2 billion in the first eight months of this year, according to Loan Pricing Corp., a New York-based agency that tracks lending. Foreign bankers turned off the spigot in August after Russia devalued the ruble. But by then it was too late. "There's no chance of recovering our money," says a Western banker.

Only a year ago, Tatneft looked like one of Russia's most creditworthy companies. It had reliable hard-currency earnings, and it had brought in Price Waterhouse to bring its books up to U.S. accounting standards and U.S. consultants Miller & Lents Ltd. to audit its oil reserves. Profits in 1997 were \$12.3 million on sales of \$2.5 billion, up from 1996 when the company lost \$290 million. Tatneft had been one of the first Russian companies to issue American depositary receipts, and its shares rose 242% in the first nine months of 1997, before slumping along with other Russian stocks.

EXPOSED LENDERS. Tatneft had started borrowing from the West in 1994, when Dresdner Bank opened a \$60 million line of credit secured by the company's oil exports. The borrowing remained modest until 1997, when Tatneft took out \$528 million in short-term loans from banks including Chase Manhattan Corp., Britain's West Merchant Bank, France's Société Générale, and Germany's Berliner Bank and BHF-Bank. Tatneft says the loans were chiefly to fi-

nance equipment to boost the productivity of its wells. But the company was also handing over cash to the government of Tatarstan, a semiautonomous republic in Russia that runs its economy with a strong hand. Unable to raise money for a backlog of unpaid bills, Tatarstan made Tatneft its cash cow, taking at least \$105 million from the company in 1997 and another \$280 million so far this year, the company says.

Surprisingly, foreign lenders didn't seem overly concerned. When Chase Manhattan arranged two syndicated loans totalling more than \$140 million in

1997, Tatneft in turn loaned more than half the proceeds to Tatarstan. Both loans were secured by Tatneft's export earnings, then about \$800 million annually. Chase Manhattan says it wasn't told about the relending to Tatarstan and wouldn't have approved loans for that purpose. But Maxim Dyomin, financial adviser to Tatneft CEO Rinat Galeev, says the company informed Chase Manhattan and other lenders, and they didn't object.

Industry analysts say Tatneft's re-lending was well known. A disgruntled officer at another Western bank that lent to Tatneft confirms that his bank knew about

the practice before approving its loan, but says Tatneft didn't reveal the full extent of it until months later. "In retrospect, clearly we should not have lent to them," the banker says. "No amount of market share is worth that kind of risk." CSFB was one of the most exposed lenders because its loan was unsecured. The company declined to comment.

Tatneft has its own regrets. Since the August devaluation, the ruble cost of its hard-currency debts has more than doubled. The company's revenues

are projected to fall at least 8% this year, to \$2.3 billion, because of depressed oil prices. It also lost \$65 million in Eurobond proceeds it had invested in Russian treasury bills before the government defaulted. "It was a mistake to borrow a huge amount of short-term debt. But we didn't know there would be such a change in the financial situation," Dyomin says.

Tatneft is still pumping oil, and it can use an estimated \$571 million of hard-currency earnings this year to help pay off its debts. But the company is hurting. To raise cash to meet its \$8.2 million monthly payroll, Tatneft now is issuing IOUs backed by crude-oil stocks. On Oct. 29, the company missed a \$13.5 million Eurobond coupon payment, but it scraped together the money before Nov. 20, when a default would have been triggered.

Foreign lenders were especially drawn to oil producers such as Tatneft because of their hard-currency earnings. But now the oil companies are struggling to pay an estimated \$1.1 billion in loan payments due by yearend, and bankers were once willingly rolled over their loans. They no longer want to do so. Russia's biggest oil company, Lukoil Holding, is one exception: It has not only kept up payments but is negotiating additional loans. Unlike Tatneft, Lukoil is not controlled by a local government that could raid for cash. And it is considered relatively transparent and well managed.

"USEFUL" EXPERIENCE. As Russia's indebted companies hunker down in talks with creditors, analysts are predicting Tatneft will win a restructuring on that will pull it back from the brink. Analysts say that's because lenders don't want to trigger a default in which they'd have to battle other creditors to get paid. Financial adviser Dyomin promises if Tatneft secures such a deal it will keep much tighter control of finances in the future. "In some ways this experience may be useful for the company," he says.

But such promises will mean little as long as cash-strapped local authorities control the company. Foreign lenders may once have ignored what borrowers did with their money. They won't make the same mistake again. For those such as Tatneft, there may still be a long climb up the learning curve.

By Carol Matlack in Moscow

FOREIGN BANKS LAND IN A RUSSIAN SWAMP

WHY THEY WENT IN

Heartened by signs of economic recovery, foreign banks increased lending to Russian corporations and banks to \$6.8 billion in 1997

WHY THEY STAYED When financial markets plummeted, borrowers asked for more loans, snagging \$5.2 billion in the first eight months of 1998

HOW THEY GOT STUCK

After Russia devalued its currency and defaulted on domestic debt, borrowers couldn't keep up payments, launching restructuring talks instead

DATA: LOAN PRICING CORP. BUSINESS WEEK



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EDITED BY JOHN TEMPLEMAN

A POLITICAL MURDER COULD SPARK REFORM—OR A CRACKDOWN

All weekend, Russians sat glued to their TV sets, trying to make sense of Galina Starovoitova's murder. The 52-year-old grandmother and respected State Duma lawmaker was gunned down by contract killers in the stairwell of her St. Petersburg apartment building on Nov. 20. Even a citizenry inured to violence was appalled.

The assassination may signal the onset of a scary new period of political vacuum in Russia. Lawlessness has risen to terrifying proportions as political thugs and mobsters take matters into their own hands. President Boris N. Yeltsin, now hospitalized with pneumonia, hasn't run the government for months. From his sickbed, Yeltsin promised to supervise the murder investigations, but few give that much credence. Prime Minister Yevgeny Primakov, meanwhile, seems to have all but given up on trying to fix Russia's broken economy. After nearly three months in office, he has yet to propose a budget.

Starovoitova is by far the most prominent victim to date. A leading democratic reformer and friend of the ailing Yeltsin, she was mulling running for Governor of the St. Petersburg region next September. The race could have pitted her against ultra-nationalist Vladimir Zhirinovskiy.

STATE OF EMERGENCY? There's a chance that her death could nurture the reforms she wanted but failed to achieve in life. Within hours, leaders of the country's splintered democratic forces, including former Prime Minister Yegor Gaidar, former Kremlin economic chief Anatoly Chubais, and Yabloko Party leader Grigory Yavlinsky, were discussing forming a united front to fight the Communists. Such efforts, however, have foundered before.

A more alarming possibility is that the murder could push

Russia into authoritarianism, under a figure such as Alexander Lebed or Gennady Zugarov. Already, calls to declare state of emergency are making the rounds of the Duma, though both Primakov and Yeltsin oppose the idea. The demands will become more insistent if Russia's corrupt and incompetent law enforcement bodies fail to find the perpetrators. Last month, several agents of the Federal Security Service (FSB), the KGB's successor, accused their superiors of an unsuccessful plot to murder wealthy businessman Boris Berezovsky. The FSB denies the charge, now being investi-

gated by military prosecutors. Meanwhile, the FSB is handling the Starovoitova case.

Starovoitova was almost certainly killed for political reasons. Five other Duma deputies have been slaughtered in as many years. But they are widely believed to have been targeted because of their business interests. In contrast, neither Starovoitova nor her family was involved in business, and she had no control over state cash or assets.

She did, though, have plenty of political enemies. She has leveled corruption charges against leading Communists. Her relations with St. Petersburg's political elite were frosty, too. She was organizing reformist candidates in a municipal election campaign already marred by violence. One candidate was bombed, and another's apartment was shot up just days after Starovoitova's assassination.

It may be some time before Russia's political life is cleared up the way she wished. If the political drift continues and the Starovoitova case disappears into the unsolved murder files, pressure could grow for early presidential elections—or even a coup.

By Carol Matlack in Moscow



YELTSIN AND STAROVOITOVA: Friends

GLOBAL WRAPUP

ITALIAN-TURKISH ROW FLARES

► Relations between Turkey and Italy have taken a nosedive following Italy's decision not to extradite Kurdish rebel leader Abdullah Ocalan. Ocalan was arrested on Nov. 12 at Rome's Fiumicino Airport and sought political asylum. Ankara quickly riposted by barring Italian companies from bidding on Turkish defense contracts. Italy's Finmeccanica had been in the running for a \$3.5 billion contract for attack helicopters. Now, retailers are boycotting Italian goods

from Barilla pasta to Pirelli tires.

But Turkey may be hurting its own interests. Italy is its fourth-largest export market, and Italian support is needed if Turkey is ever to enter the European Union. Besides, over 130 Italian companies operate in Turkey, from clothier Benetton to auto maker Fiat, which builds 200,000 cars a year there.

SCANDAL ROCKS BRAZIL

► Four top Brazilian officials resigned on Nov. 23 and rid President Fernando Henrique Cardoso of a major distraction as he pushes a \$23.5 billion

austerity program through Congress to secure IMF funding. Communications Minister Luiz Carlos Mendonça de Barros and National Development Bank President André Lara Resende quit after taped phone calls suggested they tried to help a group that considered a bid in July for part of telecom company Telebrás.

Mendonça de Barros denies any wrongdoing and maintains that the tapes were edited. His brother, Foreign Trade Secretary José Roberto Mendonça de Barros, also resigned, as did Lara Resende's deputy.



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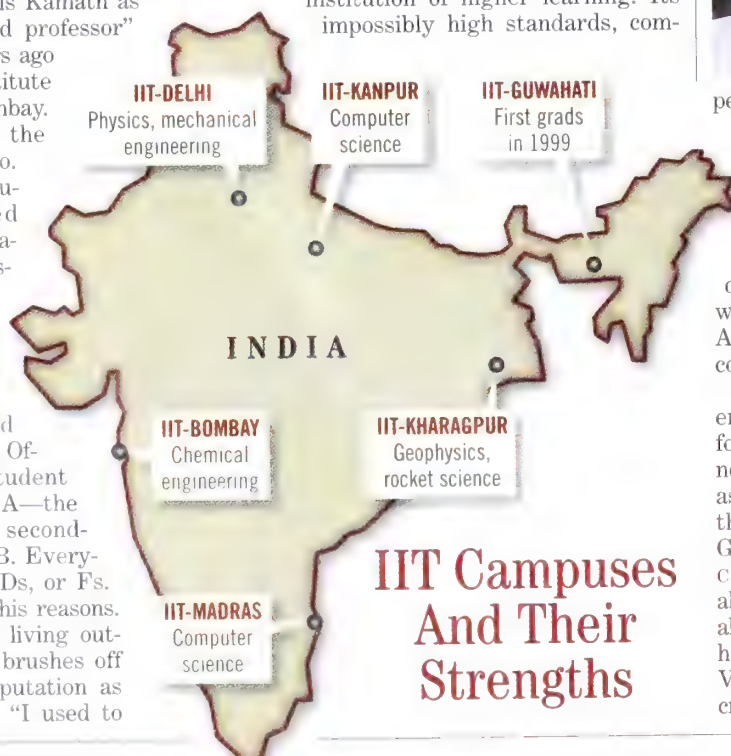
Inside the Indian Institutes of Technology's star factory

Victor J. Menezes, the 49-year-old newly appointed co-CEO at Citigroup's corporate and investment banking branch, vividly remembers his grueling college years in India—and Professor M. S. Kamath's electrical engineering class in particular. Menezes recalls Kamath as "the most dreaded professor" on campus 30 years ago at the Indian Institute of Technology-Bombay. His class was the hardest to get into.

And once in, students wondered what hit them. Kamath's grading system was a punch in the nose for students who fancied themselves as the best and brightest in India. Often, only one student per test got an A—the top scorer. The second-best score got a B. Everyone else got Cs, Ds, or Fs. But Kamath had his reasons. Now retired and living outside Bombay, he brushes off his legendary reputation as a campus terror: "I used to

tell my students, 'IIT is a center of excellence. I don't want you to be third-rate products.'"

Far from it. Some of the most prominent chief executives, presidents, entrepreneurs, and inventors in the world are graduates of IIT, India's elite institution of higher learning. Its impossibly high standards, com-



IIT Campuses And Their Strengths



PELLING the mostly male student body, average fewer than five hours of sleep a night, produce numerous graduates who are masters of problem-solving. Familiar with Western ways due to India's colonial past, they have spent their academic years studying in England, which gives them an edge over other Asians competing for jobs in global corporations.

While IIT has been producing talented engineers, scientists, and managers for four decades, the school has taken on new prominence lately. With Menezes' ascension at Citigroup on Nov. 1, and the appointment of 45-year-old Rajat Gupta as US Airways Group's CEO on Nov. 18, IIT counts two of its alumni among the highest ranks of global business. They join Rajat Gupta, who has led McKinsey & Co. for four years, Vinod Khosla, the co-founder of Sun Microsystems Inc., and hundreds of other



working in the top ranks of U.S. corporations and Silicon Valley powerhouses. (BUSINESS WEEK has an IIT connection. Graduate Vasant Prabhu is president of the Information and Media Services unit of The McGraw-Hill Companies, BUSINESS WEEK's parent.)

ENTER PRISON. Wall Street firms rely on IIT grads to devise the complex algorithms behind their derivatives strategies while big multinationals call them to solve problems in new ways. IITs are recruiting from colleges for its usual crop of consultants, McKinsey has a significant number of the school's graduates every year. Many more write software and design the chips and peripherals that Silicon Valley sells to the world. One example: The founders of Internet browser Junglee.com—all IIT grads—made fortunes in August by selling their company to Amazon.com, online bookseller, for \$180 million. The rise of IITians, as they are

LONG DAYS, LONG NIGHTS

Students average less than five hours of sleep. But all that study doesn't guarantee good grades

known, is a telling example of how global capitalism works today. The best companies draw on the best brains from around the world, and the result is a global class of worker: the highly educated, intensely ambitious college grad who seeks out a challenging career, even if it is thousands of miles from home. By rising to the top of Corporate America, these alumni lead all other Asians in their ability to reach the upper echelons of world-class companies.

It's not just that entrepreneurs have forged a path through high-tech arenas; corporate executives have proven profi-

cient at managing companies, too. Cost-cutting by US Airways' Gangwal, for example, helped pull the airline back from the brink of bankruptcy and increased revenues fourfold.

In that regard, the story of these Indians provides a model for other Asians to emulate—and an example for U.S. companies and universities to ponder. For India has created, out of limited resources, a class of executives and entrepreneurs who manage to combine technical brilliance with great management skills. And the Indian government, to its credit, has not tried to keep these first-class students at home. In many ways, the IIT grad is the hottest export India has ever produced.

To mold them, the schools put these 18-year-olds through an experience akin to boot camp. Theories learned by rote—a key element of Japanese education—are only part of the experience. "Students should see the problem and

conjure up a solution, not only memorize a theory," says Deepak Phatak, professor of computer science at IIT-Bombay. The focus is on hands-on learning. IIT maintains workshops where students even learn how to make machine tools and operate rotation motors, the kinds of crafts relegated to trade schools in the U.S.

When he helped found IIT in 1951, Jawaharlal Nehru, India's first Prime Minister, wanted an elite that could build the great state-sponsored power plants, dams, and bridges so badly needed in the newly independent country. The planners drew on Massachusetts Institute of Technology as a model and on UNESCO for funds to build the first campus, in Kharagpur, near Calcutta, in a former British prison for Indian political detainees. Five other campuses followed, in Kanpur, Delhi, Bombay, Madras, and most recently, Guwahati. At various times, the U.S., Britain, the former Soviet Union, and Germany have all provided backing.

FREE REIN. The schools have kept their edge by staying out of India's partisan politics. "It is the most uncorrupt institution in India today," says Kartik Kilachand, a New York-based consultant and IIT alumnus. IIT has an autonomous board that doesn't have to kowtow to state bureaucracies. The Indian government pays most of the \$3,000 it costs annually to educate each



ONE IN FORTY ADMITTED

McKinsey's Rajat Gupta says IIT's selection process "is absolutely draconian"

murthy, founder of software developer Infosys, and Yogi Deveshwar, CEO of Indian Tobacco.

IIT's huge campuses are vastly superior to other Indian universities but spartan compared with Western counterparts. Many of the faculty have U.S. degrees and are stars in their fields, such as V. Rajaraman, who has helped New Delhi formulate its software policy. Professors double as administrators,

student. Famous alumni in India include B.K. Syngal, chairman of Reliance Telecom, Nirmal Jain, managing director of Tata Infotech, N. R. Narayana-

limiting India's notorious bureaucratic malaise.

More than 100,000 Indians aspire to enter IIT each year, sitting for the grueling entrance exams every May. Students typically spend two years in preparation. Of those just 2,500 are admitted to the network of campuses. Fewer than 2,000 make it to graduation each year. "The process of selection is absolutely draconian," says McKinsey's Gupta.

Once in, it gets tougher. Aman Parhar, 22, a biochemistry major at IIT-Delhi, was a high school star. "But here, everyone is as smart or smarter than you are," he says. Textbooks are so expensive that an entire class of 25 often has to share a single book. Students routinely

stay up until 3 a.m. to study—or, in IIT lingo, "mug." But they get plenty of attention. Faculty-student ratios, at 1:8 or 1:11, are among the world's lowest. MIT's is 1:11.

TECHNOBRATS? Tales abound of the secrecy and ritual of IIT's dorm life. Students have their own exclusive slang where "crack" means a job well done and "fundoo," short for "fundamental," means great. The jobs and salaries grads command make them highly prized in India's contractual marriage market.

While some of the swagger gets beaten out of them by the rigors of the system, these students retain high expectations for their careers. Below the surface of being "well-mannered and polite," according to Rukmini Bh

IIT's U.S. Network: From Silicon Valley to Wall Street

VICTOR J. MENEZES
IIT-Bombay, 1970
Co-CEO, Corporate & Investment Banking, Citigroup

RAJAT GUPTA
IIT-Delhi, 1967
Managing Partner, McKinsey & Co.

RAKESH GANGWAL
IIT-Kanpur, 1975
CEO and President, US Airways

VINOD KHOSLA
IIT-Delhi, 1976
Partner, Kleiner Perkins. Co-founder, Sun Microsystems

SUHAS PATIL
IIT-Kharagpur, 1965
Founder, chip designer Cirrus Logic

RAJ GUPTA
IIT-Bombay, 1967
CEO, chemical maker Rohm & Haas

ANIL THADANI
IIT-Madras, 1968
Chairman, Schroder Capital Partners investment bank

UMANG GUPTA
IIT-Kanpur, 1971
Founder, Gupta Corp. and Keynote Systems

DESH DESHPANDE
IIT-Madras, 1973
Founder, Cascade Communications

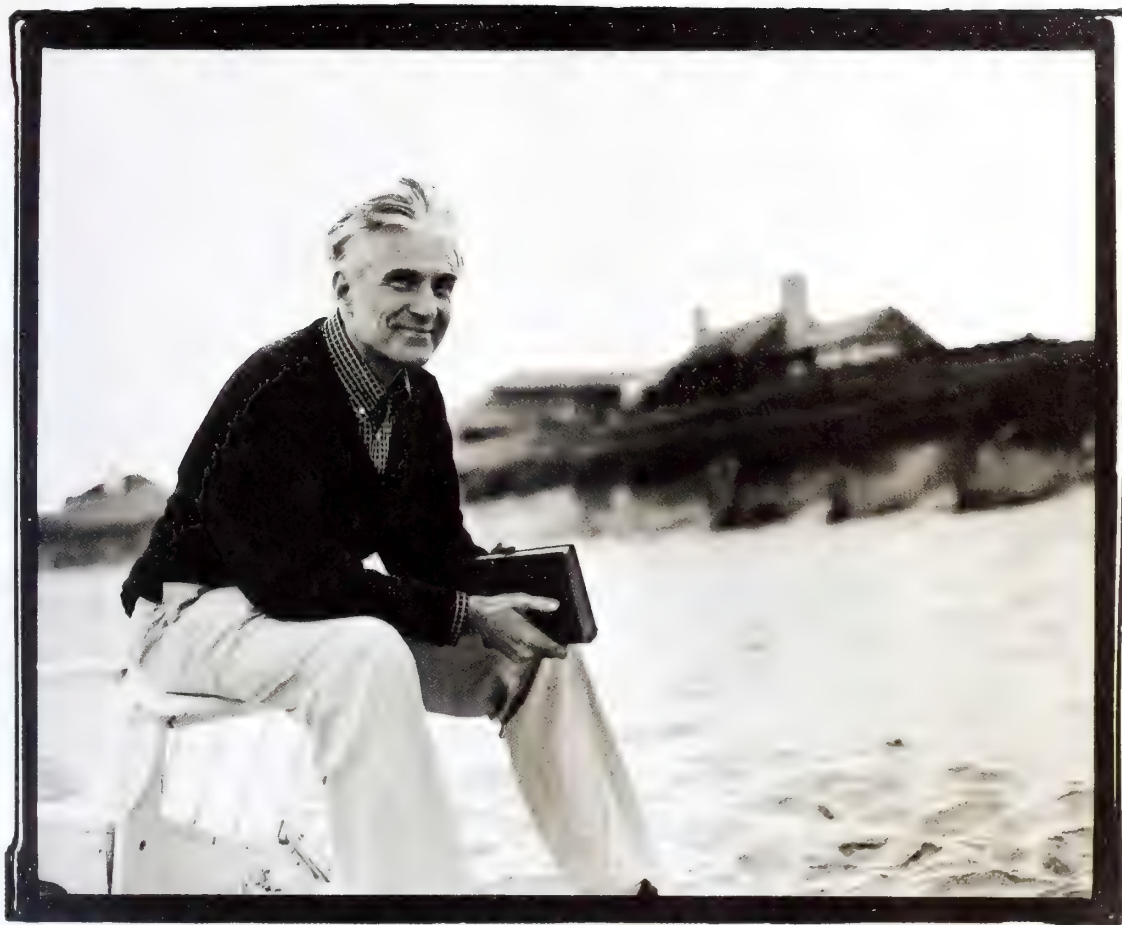
KANWAL REKHI
IIT-Bombay, 1967
Venture capitalist. Founder, boardmaker Excelan

SHAILESH MEHTA
IIT-Bombay, 1971
Chairman, CEO, Provident Financial

ROMESH WADHWANI
IIT-Bombay, 1969
CEO, founder, Aspect Development

VINOD GUPTA
IIT-Kharagpur, 1967
Founder, database American Business Information

VENKY HARINARAYAN, RAKESH MATHUR, ANANAD RAJARAMAN, ASHSIH GUPTA
IITs-Madras, Bombay, Kanpur, 1978-1993
Co-founders, internet browser Junglee.com



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Live the life you've imagined.

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The government has not tried to keep these brilliant students at home. In fact, they are India's hottest export

Nair's book on IIT, *Technocrat*, students are "ruthlessly competitive and have an annoying complacency at having 'arrived' at age 19."

This attitude often leads to disappointment with the opportunities India has to offer. Thousands of graduates have emigrated to the U.S., causing the Indian government anxiety over the brain drain of its brightest. A full 30% of the graduating class—over 500 students—headed to the U.S. for graduate degrees and better job opportunities in 1998. In the more popular computer-science programs, nearly 80% leave for Silicon Valley. So routine is the exodus that at IIT-Madras, the local campus postman and bank clerk provide unsolicited advice on the best U.S. schools to attend. When acceptance letters arrive, the postman waits outside the student's door for a tip—a large one if it's from a highly regarded university such as Stanford. While IIT does offer graduate programs, students know that an advanced degree from a U.S. institution is the entry ticket to an American or global corporation—and big bucks.

The U.S. also benefits enormously from the influx. AnnaLee Saxenian, an associate professor at the University of California at Berkeley, recently conducted a study of Silicon Valley's new immigrant entrepreneurs. According to Saxenian, of an estimated 2,000 startups in Silicon Valley, 40% are Indian-spawned, and of those, half are by IIT grads.

The influx began in earnest in the 1970s as Indian students graduated from such schools as Stanford, MIT, and Carnegie Mellon and became a vital source of brainpower in the research labs of Hewlett-Packard, Intel, IBM, and Texas Instruments. They then played founding roles in Sun Microsystems, Cirrus Logic, and numerous other high-tech powers.

Yogen Dalal, an IIT alumnus and partner with prominent venture-capital firm Mayfield, says the Valley has "a critical mass of IIT alums who can finance and guide the new generation." Suhas Patil, who founded chip design innovator Cirrus Logic in 1984, is now a prominent "angel" investor who provides early capital and business connections for Indian-owned startups. Another angel is Kanwal Rekhi, who founded and sold add-on board maker Excelan and who served as chief technology officer for Novell Inc.

Among the dozen or so startups Rekhi helped launch are Ambit Design Systems, a developer of chip-design software, and info-tech consulting firm CyberMedia.

SCHOOLYARD LESSONS. U.S. graduate schools actively seek out the institute's grads. California Institute of Technology "writes to us regularly, asking us to recommend students for scholarships they have available," says Kharagpur campus Professor Badriprasad Gupta, who is vice-chairman of the entrance-exam committee. Amitabha Ghosh, di-

ates frequently find U.S. graduate schools a breeze by comparison.

India's math-focused education gives students a leg up on American students who depend heavily on calculators in the learning process. India has a long tradition of conceptual mathematics, and schoolchildren are forced to master multiplication tables early on. The math advantage helps: Gangwal of US Airways is renowned in the aviation industry for his speedy mental calculations, and "people always pegged me as being terribly analytical guy who can



SPEED COUNTS

Rakesh Gangwal's facility for zippy mental calculations proved invaluable at US Airways

rector of IIT-Kharagpur, recalls the dean of the University of Maryland at College Park, entreating him to "send his entire graduating class to Maryland" and promising them all financial assistance. Even the French and German governments, faced with declining numbers of engineers, are trying to attract grads through exchange programs. IIT gradu-

numbers in his head." Yet it was Gangwal's number-crunching that helped through the morass at the airline.

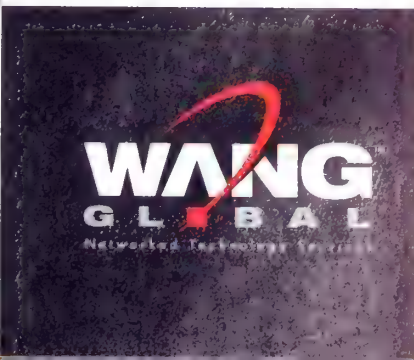
Another factor of campus life is India's diversity of languages, ethnic groups, and castes. "You learn how to manage across them," says Citigroup's Menezes, who managed to thrive in Citibank's cutthroat environment. "I couldn't survive any Indian school unless you figured out how different people think and behave."

Recently, IIT grads in the U.S. have been formalizing their powerful network. Two years ago, Indians and Indian-Americans in the San Francisco area formed The Indus Entrepreneurs, which has nearly half its 1,000 members are



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grads. "We help each other and provide role models," says Desh Deshpande, an IIT-Madras alumnus whose computer-networking company, Cascade, recently was sold to Ascend Communications Inc. for \$3.7 billion.

Now that they have the means, alums also want to help their alma mater. Rekhi last year donated \$2 million to the school and urged fellow alumni to follow suit. Says Mayfield's Dalal, who has given \$10,000 to kick off an alumni-sponsored endowment fund: "We want to make it right for the next generation."

GOVERNMENT CUTBACKS. Their help could not have come at a better time. New Delhi has been reducing funding to institutions of higher learning such as the IITs by 25% since 1993. Alumni help is taking its place: Vinod Gupta, for example, founder of Nebraska-based database American Business Information, recently built a \$3 million school of management for IIT-Kharagpur. McKinsey's Gupta is active in setting up a business school to open in 2001 in India, in conjunction with the Wharton School at the University of



Pennsylvania and Northwestern University's Kellogg School.

The IITs have also been teaming up with industry on development. IIT-Kharagpur patents a dozen new products each year. Companies such as Intel and Philips Electronics, which are big recruiters at the IITs, have funded endowments and scholarships. They have even bankrolled computer and electronics laboratories in order to keep

STRESS TESTS

Citi's dog-eat-dog culture didn't faze Victor Menezes, whose old pro gave only one A, one B.

IIT grads up to snuff on the latest technology.

The bottom line for students and grads is that India has produced a world-class university at surprisingly little cost. By nurturing schools, the government stands to reap huge rewards as these grads invest in India and draw it further into the circle of global trade and prosperity. Much like Taiwan's engineers in the U.S., IIT grads

are well positioned to set up ventures in their native country. "These Indians play a key role in the resurgence of India," says Vijay Sahni, country head of Arthur Andersen's India operations. It's not quite how Nehru thought it would be. But this school is vital to India's place in the world.

By Manjeet Kripalani in Bombay with Pete Engardio and Leah Natta. Spiro in New York and bureau rep

'I'M TOO SMART FOR YOU TO PULL THIS ONE ON ME'

Students at the Indian Institutes of Technology learned how to make do with little and cope with a lot. Here are some stories of those formative experiences:

ON SCARCE RESOURCES:

Venky Harinarayan, one of four founders of Junglee.com, a Net browser purchased for \$180 million by Amazon.com in August, is a 1988 computer-science graduate of IIT-Madras. When he went to Stanford University for his master's degree, he was stunned to have a textbook all to himself, instead of sharing a book with dozens of classmates. "It was amazing," he says.

ON GRADING:

Harinarayan recalls the rigor of examinations, particularly those given by Antony Reddy, an electrical-engineering professor, whose system was simple: Every question had to have an exact answer—down to the fourth decimal place—or the grade was zero. "We used to sweat bullets," Hari-

narayan recalls. "Students made zeros all through the course, had to take it again, and had zeros again through finals!" Another tough grader, Professor Swaminathan, who taught physics, would pepper exam papers with brutal comments pointing out what part of a problem the student got wrong—even if the final answer was correct. Swaminathan would write: "Bastard, I'm too smart for you to pull this one on me."

ON STUDENT INGENUITY:

Romesh Wadhvani, CEO of Aspect Development Inc., a leading supplier of the software used by manufacturers to monitor component procurement and product design, remembers the day in 1968 that IIT-

Bombay got its first computer. The campus was funded by the Soviet union, so this mainframe was a Russian-built Minsk II that filled an entire floor of a building. It ran on Russian operating system that nobody understood, and the manual

was also in Russian.

So Wadhvani and two other students wrote their own operating system—albeit a primitive multimedia computer. They programmed it to play the Indian national anthem at the commencement ceremony. Wadhvani later studied at Carnegie Mellon University in Pitt-



NEW DELHI CAMPUS

Indian professors were tough, IIT grads recall

sburgh, then equipped with Univac 1108, IBM 370, and Digital PDP mainframes. "When they had problems with a Univac, to me it seemed like child's play," he says.

"When a child is lost and it's dark on the mountain, your heart breaks. Last winter there was a search and rescue team following this snowboarder's tracks—**until new snow fell and covered them.** But our Night Vision showed his tracks through the new snow—so they could still follow him! Saved the kid's life. We're constantly working to improve our Night Vision viewers and to make them sturdy and reliable. We're not making gadgets; we're making the difference between life and death."

Lisa L. Miller,
Senior Operations
Engineer,
Roanoke, Virginia



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JULY 17 The Dow Jones industrial average closes at 9338, an all-time high

HOW THE BULL CAME ROARING BACK



SEPT. 2 Long-Term Capital Management discloses a 44% loss in August



AUG. 17 Russia delays payments on its debt

AUG. 31 Dow plunges 513 points, as investors, reacting to global financial troubles, dump stocks

1782
SEPT. 2

7639
AUG. 31

STOCKS

THE CASE FOR DOW 10,000

Behind the market's rise is a still-healthy economy

Have investors gone mad? Is there anything to justify a 1700-point rise in the Dow Jones industrial average in just seven weeks? Has the economy improved that dramatically? No, it hasn't.

The real story is that, all along, the economy was a lot stronger than the pundits were telling investors. Reports of the collapse of corporate profits were greatly exaggerated. Asia and Latin America did not quite melt down. Add in a dramatic series of interest-rate cuts—in the U.S. and other major industrial countries—and a recharged mergers-and-acquisitions boom, and you get a market driving toward Dow 10,000.

The market's muscle is astonishing, leaving many pros breathless. "People were too bearish before, so there's panic buying now," says W. Shannon Reid, a senior portfolio manager at First Capital

Group in Charlotte, N.C., as he watched the Dow gain nearly 215 points on Nov. 23. "It looks like a melt-up." Indeed, the sheer momentum of the market's comeback has heads spinning. Ralph J. Acampora, the market technician at Prudential Securities Inc., whose bearish predictions on Aug. 4 helped slice 300 points off the Dow that day, is again in the bulls' camp. Acampora hasn't finalized his 1999 forecast yet but says firmly that the Dow will be "well above the 10,000 mark" next year.

Indeed, the market is coming around to what Abby Joseph Cohen of Goldman, Sachs & Co. has said all year: "The fundamentals of our economy are good, profits look O.K., business investment is O.K., and consumption's O.K." And with easier monetary policy, "the Fed gave us something of an insurance policy that it's monitoring the global situation. That

makes everyone more comfortable." When, who looked gutsy in August when she said that the Dow would finish the year at 9300, still holds to her next target: 1250 on the Standard & Poor's stock index in 12 months. That's roughly equivalent to 10,000 on the Dow.

The economic picture has brightened now that the shape of the third quarter is emerging more clearly. Real growth in gross domestic product came in at 3.9% annual rate, 1.5 percentage points better than expected, production growth beat all forecasts, and even the U.S. trade deficit turned out to be smaller than expected. And the fourth quarter, once forecasted to show a sharp slowdown, could come in at near 4%. "By cutting rates, the Fed is sending a message that it wants the economy to do better," says Thomas V. Reilly, chief investment officer of Global Value Group at Putnam Investments. Reilly says he sees pickups in orders at industrial companies such as 3M and at computer and semiconductor companies.

Also coming into sharper focus at the last of the third-quarter earnings reports come in, is the realization that they were better than their headlines. Brian F. Rauscher, U.S. investment strategist at Morgan Stanley Dean Witter, says much of the disappointment in the reports were concentrated in a handful of big companies, which pulled down total earnings. General Motors



SEPT. 23
The Federal Reserve organizes a \$3.5 billion private rescue of LTCM

OCT. 15 The Federal Reserve makes a surprise quarter-point cut in Fed funds and discount rates

SEPT. 29
The Federal Reserve cuts Fed funds rate by a quarter-point

HIST
SEPT. 29

7000
OCT. 9

OCT. 9 Japan announces a plan to bail out its ailing banks



NOV. 4
Democratic gains boost the markets



NOV. 23
The market reaches a new high

NOV. 17
The Federal Reserve cuts rates again by a quarter-point

9374
NOV. 23

9., which suffered the effects of a te, was the biggest drag on the S&P with a \$570 million operating loss, a billion drop from the third quarter of 1997. "That's not due to a fundamental weakness in the company, but a time event," says Rauscher. Take GM, and the S&P earnings improve mostly, from -2.9% to -1.2%. Most of other depressants came from write-in the financial sector and a drop in company earnings in the wake of a drop in oil prices.

MODITIES REBOUND. In short, much the downdraft in earnings was concentrated in a few sectors; it was not a widespread affliction for Corporate America. According to Rauscher's analysis, 32% of the 476 companies that have reported their third-quarter numbers a profit gains over 1997's third quarter and 3% matched. And the median 500 company recorded a nifty 9% over-year gain. According to Rauscher, the stage is already set for over-year profit gains of 3% to 5% in the fourth quarter. With some firming energy and commodities, Rauscher says earnings can go up 7% to 9% a year.

course, a rebound in commodities mixed bag. Higher prices would the depressed energy and natural-resource companies, but lower commodity prices help the economy by keeping inflation at bay. Indeed, that's part of

what's driving stocks. From Nov. 12 to Nov. 23, when the Dow gained 544 points, or 6.2%, the CRB/Bridge Futures Price Index, an amalgam of 17 commodities futures prices, dropped 4.6%.

The annual gain in inflation is now 1.5%, the lowest since the 1960s. "If you can get 5% real earnings growth when inflation is near zero, you have an attractive environment for stocks," says investment strategist Edward M. Kerschner of PaineWebber Inc. "Double-digit earnings growth invite the Fed to start raising rates."

The Fed has pushed short-term interest rates lower, and that is a powerful stimulus for stock prices. Just look at the "two tumbles and a jump" signal, an indicator developed by Norman Fosback of the Institute for Econometric Research: When either the discount rate, the banking reserve requirement, or the margin requirement are lowered twice after an increase, the market usually makes big gains.

How big? Twenty calendar days after the signal, the S&P 500 is usually up an average of 4%. (By Nov. 23, just the sixth day after the second discount rate cut, the S&P was up 4.3%). According to Fosback, the average S&P gain after three months is 11%; after six months, 15.9%, and after one year, 29.7%. Fosback says the two-tumbles signal is most effective in the six-month and yearly intervals. In 18 of 19 times, re-

turns have been positive. Even with the signal pointing to higher stock prices, Fosback himself is bearish, mainly because of high price-earnings ratios. Still, admits Fosback, "it's tough to go up against the Fed."

THE "WALL OF WORRY." Rather than acting as a depressant, such bearish sentiment is usually a positive for stocks. Bull markets climb a wall of worry, because bad news has already been discounted, so positive developments send the market higher. There's still plenty of worry about. Asia is not yet out of the woods. Investment strategist Charles I. Clough of Merrill Lynch & Co., bearish on stocks for several years, remains unconvinced that corporate profits will rebound in coming quarters. "Consumption and investment are already well above the long-term trend, yet earnings are weak," says Clough. "With low inflation and no pricing power, how are you going to get better earnings?"

Mergers help, certainly, by allowing companies to slash overhead, build market share, and gain economies of scale. On Nov. 23 and 24 alone, deals worth \$70 billion were announced, according to Securities Data Co. Still, this stock market isn't dependent on dealmeisters to keep moving up. The economy's resilience and vitality is likely to keep the market on the march to Dow 10,000.

By Jeffrey M. Laderman
in New York

COMMENTARY

By Thane Peterson and Gary Silverman

IS DEUTSCHE BANK 'OUT OF ITS DEPTH'?

It's the biggest acquisition ever of a U.S. financial institution by a foreign bank. But it looks like the same, sorry old story. For nearly a decade, German giant Deutsche Bank has spent billions trying to make a go of it in investment banking. Now, with its proposed \$9 billion all-cash purchase of Bankers Trust Corp., the bank is upping the ante, striking a deal to create what would be the world's largest financial institution. But analysts and rivals are properly skeptical that Deutsche Bank will fare any better. "I'm worried Deutsche is getting a little out of its depth," says Mark Hoge, a London-based Credit Suisse First Boston analyst. "It could get messy."

Indeed it could. In buying BT, Deutsche is hoping to build up its presence in the U.S. and extend its reach into the capital markets. But Bankers Trust's finances are shaky, and the deal adds little in the areas where Deutsche is weakest. Analysts worry the merged institution will be plagued by the cultural conflicts and management defections that have undermined an array of initiatives to build a successful investment banking team—from Deutsche's costly attempts to beef up Morgan Grenfell, the British investment bank it bought in 1989, to recent abortive ventures in Silicon Valley. Plus, BT's fo-

DEUTSCHE CEO BREUER:
Did he get a bargain?



HARDLY A SLAM DUNK

The Deutsche-Bankers deal carries more problems than virtues

PROS

- Deutsche gains a big U.S. foothold, with increased capabilities in high-yield debt, equity underwriting, and asset management.
- After suffering huge losses, Bankers gets enough capital to fund future growth.

CONS

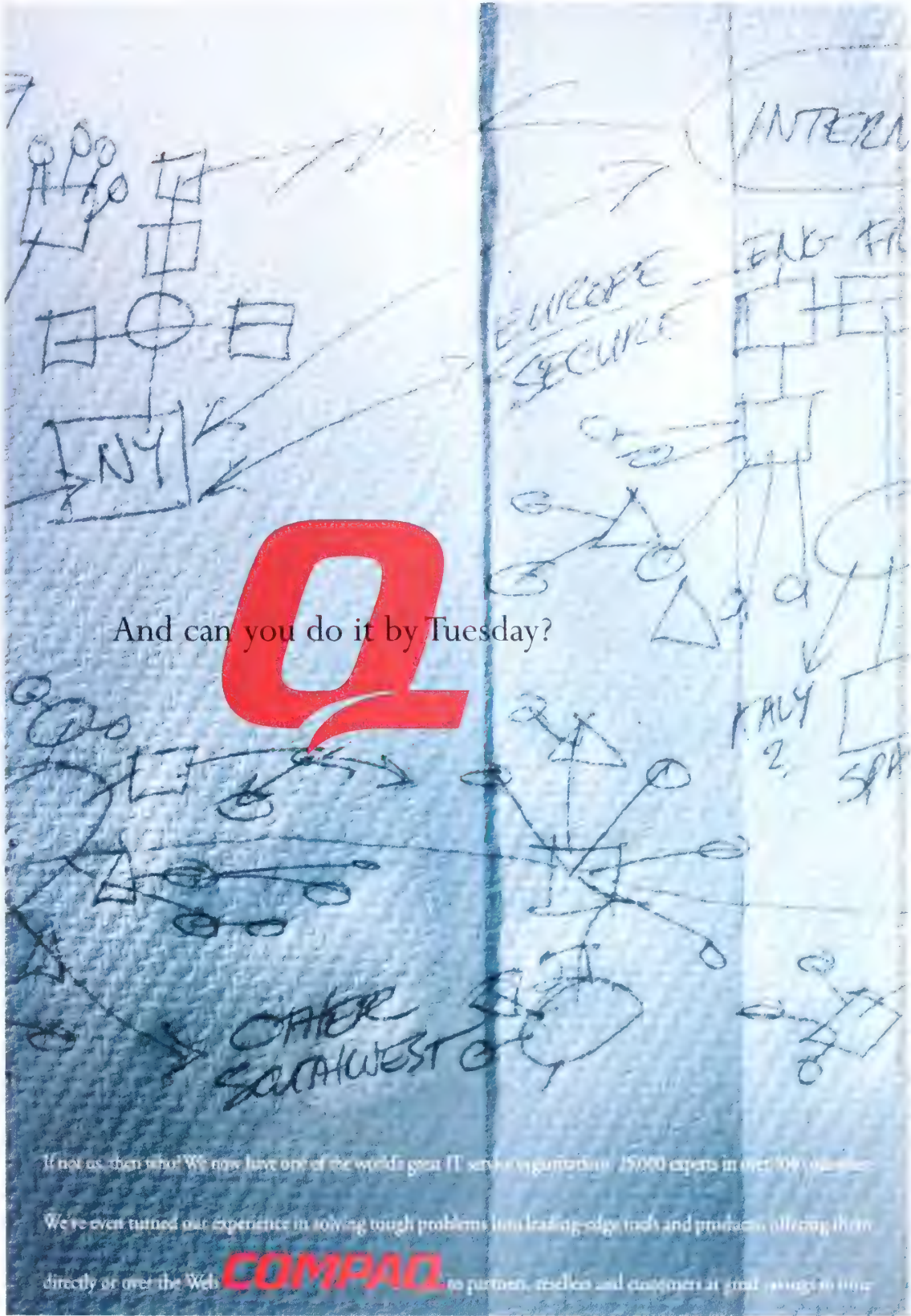
- Neither Bankers nor Deutsche has a flair for innovative management. And commercial banks often have trouble handling investment bankers.
- Bankers Trust isn't a top-ranked underwriter or mergers-and-acquisitions adviser.

DATA: BUSINESS WEEK

cus on junk bonds and derivatives seems risky for a conservative bank like Deutsche. "BT is like Long-Term Capital Management with corporate overhead attached," snipes a rival investment banker, referring to the U.S. hedge fund that collapsed this year.

BT isn't coming cheap either. Deutsche's \$93-per-share offer is more than twice BT's book value. By comparison, Travelers Group Inc. paid 1.7 times book value in 1997 for Salomon Brothers, another Wall Street firm with a reputa-

tion for rolling the dice. And BT itself was trading for just about book value as recently as last month. "It did not seem to me that Bankers Trust was in a good position to negotiate good price, but they did," says James K. Schmidt, manager of the John Hancock Financial Industries Fund, an owner of BT shares as of October. **CASH HOARD.** BT has had a long history of problems. In 1995, Frank N. Newman, a former U.S. Treasury Dept. official, was recruited to clean up the bank's scandal-plagued derivatives operation. But Newman, now CEO, has faltered in his efforts to reduce the bank's exposure to risky



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businesses. In 1998's third quarter, BT lost \$488 million, dragged down by bets in Russia and other emerging markets. And its leverage ratio, a gauge of capital adequacy, slipped for a time below the Federal Reserve's 3% minimum. BT scaled back, especially in emerging markets. "They were basically in a liquidation mode," says Charles W. Peabody, an analyst at Mitchell Securities in New York.

While the Germans are coming to the rescue, raising cash to finance the deal could cost Deutsche a bundle. Sure, the Frankfurt-based bank is cash-rich, with some \$27 billion in investments in such companies as carmaker DaimlerChrysler and insurers Allianz and Munich Re—many of them booked years ago at a tiny fraction of today's value. Indeed, Deutsche's shares shot up after news of the deal leaked out, partly because investors are happy the bank is finally spending some of its cash hoard. But that could be a mixed blessing. Deutsche will probably have to pay Germany's punishing capital-gains tax of 50%-plus on any assets it sells.

CULTURE CLASH. The bigger worry: how much BT will actually be able to help Deutsche's flagging investment bank. Strategically, BT is strongest in derivatives and high-yield bonds. It bolstered its equity businesses by buying Alex. Brown & Sons last year and the London-based investment banking unit of National

Westminster Bank PLC this year. But BT ranked only 22nd this year among U.S. debt and equity underwriters, according to Securities Data Corp. (table). And BT adds little in mergers and acquisitions, where Deutsche is weakest. Combined, Deutsche and BT would only rank 10th this year in M&A, with 6.6% of deals done, Securities Data says.

BT also may not add much in management firepower. After the merger, analysts expect the investment banking unit to be run jointly by Newman and Josef Ackermann, the Deutsche



BT'S NEWMAN: His risk-reducing effort faltered

Bank board member mainly responsible for investment banking. But Newman doesn't have much of an investment-banking track record. And Ackermann, a Swiss, is a rare outsider at Deutsche, having joined the bank in 1996, after being passed over for the top job at Credit Suisse.

Cultural issues may impede the deal. "Merging commercial bankers'

such as tech specialist Frank Quattrone and Carter McClelland, both of Morgan Stanley & Co. But after a \$1.5 billion restructuring—led by Ackermann and designed to foster cooperation between investment and corporate bankers—was announced this year, most of the highfliers defected.

The result, says one former executive, was that to create an investment bank, Deutsche had to buy one. "They can't build," he says, "because no one will go to work for them." The BT deal may help shore up the ranks, notably in U.S. high tech, where Alex. Brown is strong. But key Alex. Brown bankers have quit, too. And, figures Salomon Smith Barney analyst Matthew Czepiewicz, even without more defections, Deutsche may need to pour in

\$1 billion more to build a first-class investment banking team.

Despite these risks, Deutsche could be getting a bargain if BT rebounds. After all, the bank earned \$866 million in 1997, and its 16.1% return on equity was about equal to Deutsche Bank CEO Rolf E. Breuer's profit goal for his bank. Deutsche board member Jürgen Krumnow told Reuters that

the bank expects "enormous synergy effects" from the merger. Analysts translate that into layoffs of around 2,000, about 2% of the combined workforce, and cost savings of some \$600 million from eliminating overlapping operations.

Investors liked the concept of the deal. After news of the deal leaked out, shares of Lehman Brothers, J. Morgan, and other rumored Deutsche targets in the U.S. soared. Crosstown rival Dresdner Bank added fuel to the fire by saying it, too, might go for a big merger.

No doubt Breuer and Newman may have created the world's largest financial institution. But they may have trouble living with each other

SMALL POTATOES

U.S. debt and equity underwriting: deal rankings and market share

| | BANKERS TRUST | | DEUTSCHE BANK | |
|-------|---------------|--------------|---------------|--------------|
| | RANK | MARKET SHARE | RANK | MARKET SHARE |
| 1995 | 16th | 0.7% | 17th | 0.5% |
| 1996 | 17th | 0.8% | 16th | 1.0% |
| 1997 | 19th | 0.6% | 15th | 1.1% |
| 1998* | 22nd | 0.5% | 17th | 0.9% |

*THROUGH NOV. 23

DATA: SECURITIES DATA CO.

style with entrepreneurial, driven investment bankers is hard enough," says Louis Perlmutter, executive managing director of Lazard Frères & Co. "The difference between German and U.S. banking culture makes it that much harder." And Deutsche's record is hardly inspiring. Says one former Deutsche investment banker: "Deutsche Bank doesn't have a very good track record at bringing in outside executives and keeping them."

In recent years, Deutsche has spent heavily to hire high-profile investment bankers from U.S. rivals,

Peterson is Frankfurt bureau chief. Silverman covers finance in New York.



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COMMENTARY

By Joseph Weber

WHY CANADA SHOULD LIGHTEN UP ON FOREIGN BANKS

It would be as if the consolidation race in U.S. banking ended with only Citigroup, Bank of America, and a handful of stragglers crossing the finish line. Within the next few weeks, Canadian banking authorities are expected to rule on two proposed mergers that would spawn almost unprecedented concentration for a developed country: a pair of megabanks, each almost as big as Chase Manhattan Corp., America's third-largest, along with a smaller titan and a clutch of niche players.

Good idea? A growing number of critics say the deal only benefits the top executives of the two proposed megabanks: Royal Bank of Canada/Bank of Montréal and Canadian Imperial Bank of Commerce/Toronto-Dominion Bank. "When is big too big? When is powerful too powerful?" asks Peter Godsoe, chief executive officer of Bank of Nova Scotia, Canada's fifth-largest bank. These deals, he argues, would be anti-competitive, giving two banks control of nearly 70% of Canada's domestic banking business. A task force of the governing Liberal Party in Parliament adds that there is "virtually no constituency of support beyond the merger-seeking banks."

What to do? In the spirit of NAFTA, Ottawa should open its financial system fully to foreign banks. These outfits now come in chiefly to serve specialty markets and must contend with all but suffocating restrictions. But if U.S. banks could compete fully and fairly north of the border, Canadians would rapidly wind up with a Niagara-sized menu of financial choices.

PROMISING START. With stiff competition from outsiders to keep the home crowd honest, the merger arguments—that Canada needs players with enough heft to serve global markets—would be more convincing.

At \$317.2 billion in assets, Royal and Bank of Montréal would be Canada's biggest bank and among the top 25 in the world. CIBC and TD, with \$313.3 billion, would rank nearby. Without such size, the banks argue persuasively, they would lose standing globally as the industry worldwide consolidates. Latest evidence: Deutsche Bank's purchase of

Yet newcomers operate in Canada under chafing restrictions. They cannot open branches of their offshore parents but must set up separately based and capitalized banks. Nor can they hold more than 10% of the shares in a large Canadian bank—a restriction on all Canadian investors, too—making takeovers impossible. Outsiders control a paltry 10% of

Canadian banking assets, one of the lowest shares in the world.

BIG BRAWL. Opening up the market could have salutary effects. By either buying up Canadian outfits or picking up redundant facilities of merged giants, the American banks could ignite a financial free-for-all that would be a boon to the Canadian consumer. Hongkong Bank lately has become a force in the Canadian West by catering to the burgeoning regional immigrant market there.

But the Canadians would not be the only beneficiaries. If American banks ever do get to set up shop fully in Canada, Canadians will have a thing or two to teach them. Canadian bankers have far outdistanced their Yank counterparts in promoting debit cards, which are accepted by nearly everyone from corner convenience stores to the biggest malls. Electronic banking generally is a step ahead in Canada. Americans send staffers to study Canada's

payments system to see how checks clear, often in hours.

In short, if the borders were fully opened, bankers on both sides would be forced to improve and, most important, serve the citizens of both countries better. Otherwise, the cozy Canadian banking cartel will either get a lot cozier or fade fast from the global financial scene.

Joseph Weber reports from Toronto.



New York's Bankers Trust Co.

With such deals on the upswing, only robust competition will protect consumers. Already, Canadians are benefiting from the limited competition permitted from foreign banks. MBNA Corp., the U.S. credit-card giant, for example, is shaking up consumer-credit markets in Canada. Through a chartered Canadian bank that MBNA created, it is blitzing homes with low-rate card offers and giving credit-card users more choice.

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BY GENE G. MARCIAL

SPRINT: SAUNTERING AFTER EARTHLINK?

Riding high among the sizzling Yahoos and AOLs of the world, EarthLink Network (ELNK), a little-known Internet stock, may soon attract huge investor attention.

This second-largest independent provider of sophisticated Internet services (America Online is No. 1) is behaving like a superstock: It's up 318% so far this year, compared with 295% for AOL, 476% for Yahoo!, and 566% for Amazon.com. Several bulls think EarthLink will charge higher still: Sprint, the No. 3 U.S. long-distance company and a top carrier of global Internet traffic, may opt to acquire EarthLink, of which it already owns 29%.

Robin West, who steers \$1.5 billion at the New Mexico State Investment Council, says: "It's not a question of whether Sprint will buy the rest, but when." The longer Sprint waits, she adds, the more it will have to shell out. At EarthLink's current price of

56, its market cap is about \$2 billion, based on fully diluted 36.7 million shares. In June, the two companies formed EarthLink Sprint Internet Service. Sprint Chairman and CEO William Esrey said at the time that EarthLink was the "perfect Internet-access partner for Sprint."

What will the takeover price be? West figures that AOL, which is currently acquiring Netscape Communications, values subscribers one to two years out at \$1,200 apiece. Based on EarthLink's projected subscriber count of 4 million in two years, West calculates the company is worth \$4.8 billion, or \$120 a share. "That's inexpensive," she adds. EarthLink was highlighted earlier in this column (BW—Sept. 7, 1997), when it was trading at a split-adjusted 6½ a share.

Andrea Grosz, Internet maven at Everen Securities, also thinks Sprint "will ultimately own 100% of EarthLink, pay-

ing "a rich premium" for the remaining 71%. One reason: EarthLink's subscriber list is growing faster than that of any other Net provider, including AT&T, MCI WorldCom, and the regional Bells. Moreover, she says, there are few large providers up for grabs.

An EarthLink spokeswoman notes that a standstill pact signed in February bars Sprint from buying EarthLink for 39 months. But some pros argue that Sprint could opt to break the agreement.

HUMMING ALONG AT HUMDRUM TEREX

Terex (TEX) is no Internet stock, nor is it in a glamour business. It makes mobile cranes and gear for mining and handling materials—a highly cyclical industry. Despite its humdrum business, the stock has been hot: After hitting a 52-week low of 14 a share on Oct. 12, the stock snapped back to 27½ by Nov. 23.

Stephen Volkman of Morgan Stanley Dean Witter thinks Terex will keep on shining, as the market comes to appreciate Terex' "strong earnings visibility." Since 1993, sales have grown 31% a year—as Terex consolidated companies in its businesses, says Volkman. His near-term target for the stock is 35.

"I am very impressed with CEO Ron DeFeo's savvy," says Tobias Levkovich, an analyst at Salomon Smith Barney. DeFeo, he adds, "isn't finished building up and broadening a company that had been losing heavily before he came on board" in January, 1995.

The stock was then trading at 5½, and 1994 sales were \$314 million. But last year, Terex posted sales of \$842 million and is expected to hit \$1.3 billion this year. DeFeo thinks revenues will reach \$2.5 billion in 2002, through growth and further acquisitions.

Analysts have been playing catch-up since DeFeo took the helm. He has not only managed to beat estimates each year but has also surprised them with lucrative acquisitions.

Levkovich raised 1999 earnings forecasts by 10¢ a share, to \$4.35, after Terex bought two European tower crane makers—with combined sales of \$75 million—for \$22 million. He expects \$3.22 for 1998. With DeFeo's history of acquisition turnarounds, cost slashing, and underpricing rivals by 10% to 15%, the buys will crank up earnings fast, he says.

BIOMIRA'S ASSAULT ON CANCER

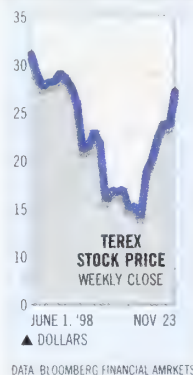
With a market cap of just \$100 million, Biomira (BIOMF) isn't on big investors' screens. But some pros find the stock compelling: The company is developing a vaccine, called Theratop, to battle breast cancer. And biotech leader Chiron is Biomira's partner in producing the vaccine.

The Food & Drug Administration has approved Phase III clinical trials for Theratop, and Biomira will soon announce the enrollment of patients for the trials—at 70 sites in the U.S. and Europe—to evaluate the vaccine's effectiveness in treating metastatic breast cancer in patients who have already undergone chemotherapy.

Karen Boezi of Coral Ventures, which owns about 1 million shares of Biomira, says Chiron's holding a stake in Theratop adds validity to the undertaking. As results from the trials emerge, Biomira shares, now at 2½, should surge. The market for the vaccine, says Boezi, is "huge."

Trials will take 18 months, and the first submission for FDA review is planned six months after enrolling all 900 patients. The Biomira-Chiron pact gives Chiron exclusive marketing rights in the U.S., Japan, Australia, and European countries. In addition, Biomira has rights to Canada and countries in Asia and the Mideast.

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A 'HUGE' MARKET DOWN THE ROAD



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COMMENTARY

By Keith Dunnivant

PIGSKIN PLAYOFFS: A COLLEGIATE NO-BRAINER

For decades, major college football has been trapped in a financial netherworld, confined by its own contradictions. Part big business, part benefactor, the sport generates hundreds of millions of dollars each year in ticket sales, broadcasting rights fees, postseason bowl appearance guarantees, and product licensing. But an increasing percentage of that money is consumed by various nonrevenue sports—especially the federally mandated programs for women.

Still, college ball refuses to switch to a big-money tournament structure to crown a national champion. For more than a half-century, *numero uno* has been chosen by postseason polls of coaches and journalists, a system that invariably inches more arguments than it resolves. In 1991, the vagaries of the polling system were mitigated somewhat when the major conferences formed a partnership with the Tostitos Fiesta Bowl, the Nokia Sugar Bowl, and the FedEx Orange Bowl to rotate a No. 1-vs.-No. 2 matchup billed as the national championship game.

HEAR-CUT? But the flaws in that system were exposed in 1996, when Penn State finished unbeaten and unowned without having a shot at the title. As a result, the Big Ten and Pacific-10 conferences joined the coalition of major leagues, along with the Rose Bowl, to produce the Bowl Championship Series (BCS). The two highest-rated teams will meet this year at the Tostitos Fiesta Bowl on Jan. 4. "This is what the American public has been clamoring for," says Brian Litner, senior vice-president for programming at ABC Sports, which

owns the rights to the game.

Well, not quite. Unlike the popularity contests of the past, the BCS rating system combines team records, two major polls, computer rankings, and opponents' records to determine the top teams. "Our goal was to create a system that goes beyond the subjective nature of the polls in order to produce a clear-cut national championship game," says Southeastern Conference Commissioner Roy Kramer, coordinator of the BCS.

team tournament modeled on the National Football League playoffs that uses the existing bowl structure. That would turn all those meaningless December bowls into elimination rounds worthy of a national obsession, like the March Madness preliminaries to college basketball's Final Four.

POT OF GOLD. One large stumbling block is the opposition of the vast majority of college presidents and coaches. Among other things, they believe a playoff system lengthening



GO FOR IT: A tourney would settle the season—and excite fans

Even though the BCS is a positive step toward a playoff system, it could quickly become mired in controversy after this season if Tennessee, UCLA, and Kansas State all finish unbeaten. One of these teams would be left out of the so-called national championship game. And who's to say Florida State, with just one loss, couldn't beat an undefeated UCLA team? Why is an undefeated team necessarily the national champion?

The problem with using any sort of ranking to anoint two teams is that it takes the decision off the playing field, where anything can and often does happen. The solution is a 16-

the season would increase pressure on student-athletes and lead the sport further down the path to commercialization. Well, hello. College football is already there.

A full-blown tournament could, according to various estimates, generate \$250 million to \$400 million per year for the schools involved. With that pot of gold sitting in the end zone, it's only a matter of time before cash-strapped major colleges go for the playoff idea. So why wait?

Dunnivant is editor-in-chief of the college football magazine Dunnavant's Paydirt Illustrated.

THE FORMULA

Bowl Championship Series rankings are determined by the following:

- ▶ Team's record
- ▶ The computer rankings of *USA Today*, *The New York Times*, and *The Seattle Times*
- ▶ The Associated Press journalists' poll and the ESPN/*USA Today* coaches' poll
- ▶ Strength of schedule, which ranks teams according to the records of their opponents

BASKETBALL

NOT THE ONLY GAME IN TOWN

Can the NBA be replaced?
No, but...

The arenas where the NBA plays are dark and will stay that way for some time. Even if quarreling owners and players strike a bargain, there would be no season until the middle of January. The lockout is a bummer for the National Basketball Assn., all right. But are the league's troubles opening up opportunities for other sports enterprises? It depends.

The National Hockey League says its demographics more closely resemble those of the National Football League than the NBA. In other words, hockey's fan base isn't going to grow because Charles Barkley is walking a picket line. "There's potential for more exposure to hockey—we welcome that. But to say we have an opportunity to

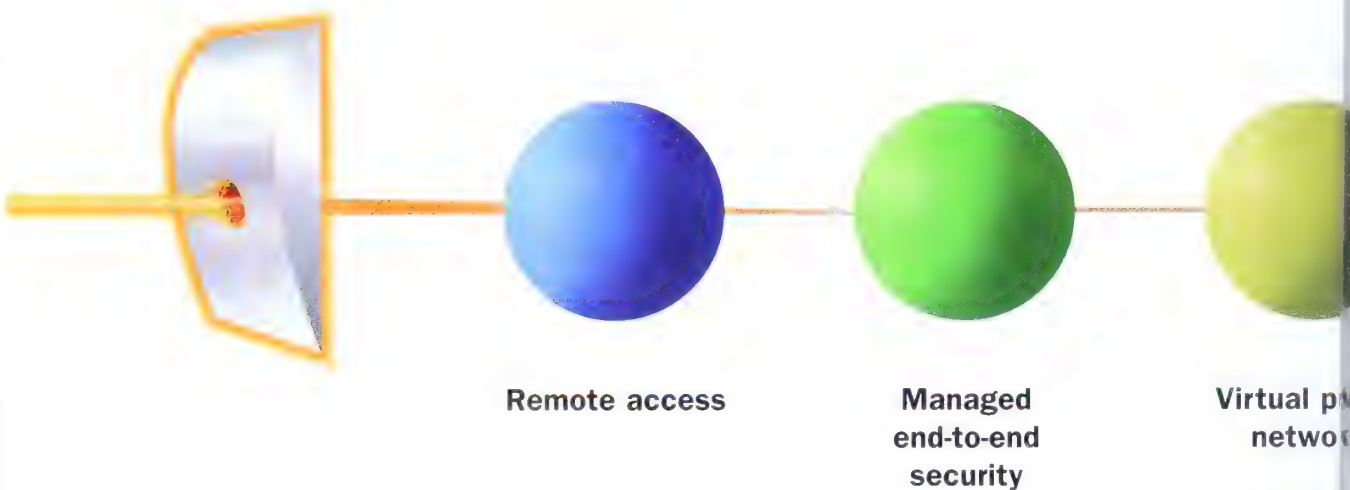


JUMP BALL: The ABL has pitched ads at NBA fans, but so far, crowds aren't

capture all these NBA fans isn't valid," says NHL spokesperson Bernadette Mansur.

Other leagues, though, do smell profit. Take the brash American Basket-

ball League. The women's league is wooing refugees from the NBA with dead-aim advertising. One ad reads: "Looking for pro hoops? We're taking!" Says ABL co-founder Gary Co-



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DePaul's Blue Demons, whose thunder is usually stolen by the Chicago Bulls, have enjoyed a 40% climb in season-ticket sales

BULLS ASKED DePAUL TO PULL THIS AD AFTER IT RAN ONLY TWICE

"It's a real opportunity for us in terms of both exposure and a way to build our fan base. No question the lockout has enabled us to get the media coverage without endless highlights of people dunking in the gymnasium." Another ABL advertisement features a drawing of a huge wall. "NBA Lockout!" the copy reads. "Only ones who get [arrow pointing to the screw] are the fans." Cavalli acknowledges that "only one or two of our teams wanted to use the wall ad. The rest thought it was too direct."

LEGACY TRY. Whether disenchanted fans will connect with the ABL remains to be seen. Three weeks into the league's third season, attendance hasn't moved from last year's average of 300 fans a game. And in Portland, Denver, and two cities where the men's league competes head-to-head with the NBA, crowds in November were even smaller.

College basketball has also had its

eyes on the NBA crowd. At Southern Methodist University in Dallas, however, school officials are avoiding mention of the lockout in advertising campaigns. In the past, the Mustangs' men's basketball team has had cross-promotional deals with the NBA Dallas Mavericks that, says SMU spokesman John Jackson, "in no way do we want to jeopardize."

DePaul University in Chicago has been less reserved. The Blue Demons, who are usually lost in the shadow of the NBA champion Bulls, recently ran a newspaper advertisement that took a playful jab at Michael Jordan & Co. "Don't get locked out. Buy your season tickets now," the advertisement said. It ran only twice. "We got a call from the Bulls on that one saying, 'We wish you wouldn't do that,'" says DePaul Athletic Director Bill Bradshaw. "I was flattered. It was the first time that they had noticed us in 10 years." Fans are noticing DePaul, too: Sales of sea-

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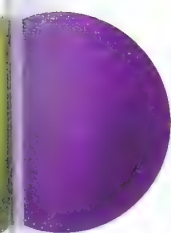
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|-------------------------------|---------|------------------------------|---------|
| EXHIBITION GAMES | | EXHIBITION GAMES | |
| 11/1 vs. World All Stars | 7:00 pm | 11/1 vs. Chicago Challengers | 5:00 pm |
| 11/6 vs. California All Stars | 8:00 pm | 11/6 vs. Foreign Team | 7:00 pm |
| HOME OPENER | | HOME OPENER | |
| 11/24 vs. UNC Wilmington | 7:30 pm | 11/20 vs. Northwestern | 7:30 pm |

son tickets have increased by approximately 40%.

Professional wrestling also seems to be benefiting from the NBA lockout. A World Wrestling Federation event in Houston recently drew a healthy crowd, including at least one spectator who would normally be at work—Los Angeles Lakers center Shaquille O'Neal.

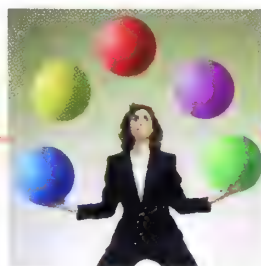
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EDITED BY AMY DUNKIN

Stocks In Their Stockings

If anyone on your holiday list is an avid investor, here's a way out of the gift rut: Think stocks, not socks.

Whether you're giving to novices who are eager to hone their

INVESTING

Street smarts or to a raging bull looking to gain an edge, a wide range of software, books, and electronic devices can help investors determine whether to buy, sell, or hold. Other items simply celebrate an interest in things financial.

Since successful investing is as much an art as a science, let your loved ones put their passion on display with vintage stock certificates. One of the best sources is Anderson Investor's Software (800 286-4106), which, for \$29.95, sells six certificates, all of them guaranteed to be at least 25 years old and in mint condition, with the original watermarks. All of the companies involved are defunct, but many people may still like seeing famous names from the past, such as Pennsylvania Railroad, Howard Johnson, and United Whelan (once a public subsidiary of E. F. Hutton).

FRAME-UP. For art that has real potential for appreciation, San Francisco's One Share of Stock offers a framed certificate—for a real share of stock—for nearly 100 active companies, including Microsoft, Coca-Cola, Starbucks, and publicly traded pro-sports franchises. For

the younger set, One Share offers shares of Walt Disney, Marvel Comics, and Toys 'R' Us mounted in a special "My First Stock" frame. The price: \$80 to \$99, depending on frame style, plus the current

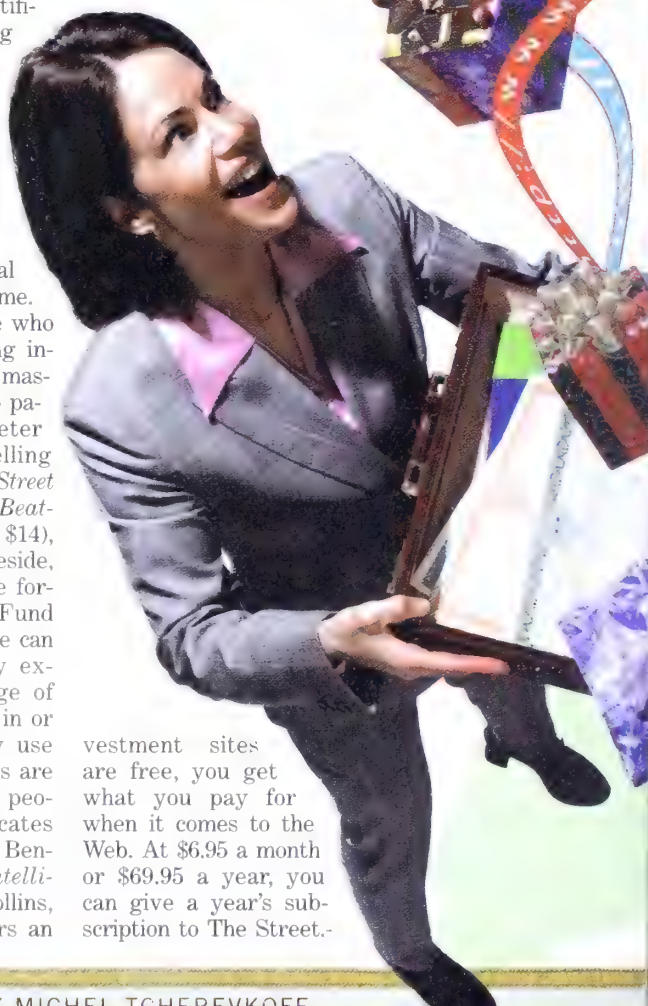
cost of a share (which, for Coca-Cola, is about \$73). One Share requires three to eight weeks to obtain the certificates from the issuing companies. But up until Dec. 23, the company will ship overnight a laminated "presentation certificate," which the donor can wrap to alert the recipient that the gift is on its way.

It's hard to make real money one share at a time. So if you know someone who would appreciate getting investment advice from a master, you could bundle up paperback copies of Peter Lynch's three best-selling books, *One Up on Wall Street* (Penguin USA, \$13.95), *Beating the Street* (Fireside, \$14), and *Learn to Earn* (Fireside, \$13). Each builds on the former Fidelity Magellan Fund manager's mantra: People can pick winning stocks by exploiting their knowledge of the industry they work in or the products that they use every day. Lynch's books are written mostly for lay people: Market sophisticates would better appreciate Benjamin Graham's *The Intelligent Investor* (Harpercollins, \$30), a classic that offers an

in-depth study on valuing stocks.

Of course, any serious stock-market investor will need to use the World Wide Web to stay abreast of current conditions. While countless in-

vestment sites are free, you get what you pay for when it comes to the Web. At \$6.95 a month or \$69.95 a year, you can give a year's subscription to *The Street*.





sonal Wealth (Standard & Poor's, like **BUSINESS WEEK**, is owned by The McGraw-Hill Companies). Personal Wealth not only provides specific buy, sell, or hold recommendations for thousands of stocks and mutual funds but also helps subscribers build their own asset-allocation plans. It costs \$9.95 a month; \$7.95 for America Online subscribers.

QUOTES ON THE GO. If your recipient knows more about computers than convertible bonds, the perfect cybergift may be a *Value Line Investment Survey for Windows* (800 535-8760, \$55 for a two-month trial). Describe your dream stock—say 20% annual growth and a steady 2% dividend yield—and Value Line will churn through its 1,700-stock database to find those that meet the standard. Value Line also offers a similarly priced screening program called *Mutual Fund Survey for Windows*.

For the on-the-go investor, a number of wireless devices let you track your portfolio no matter where you are. One of the more affordable is the \$195 Link II device from SkyTel Communications and DataLink Systems. For \$35 to \$50 a month, you can receive real-time quotes and news headlines for stocks. The Link II's strength is retrieving quotes for a portfolio you've established on Data-

Link's Web site. To grab quotes for other stocks, you need WolfeTech's \$300 PocketGenie. For roughly the same monthly access fees as the Link II, it allows you to request real-time quotes and news on the fly using the Motorola PageWriter 2000. But beware: Many of the headlines are too cryptic to be of value. A search for news on Intel drew "Symantec completes Quarterdeck tender offer." For that to make sense, you would have to know that Intel has a joint venture with Symantec.

For many investors, a big mystery is determining the returns they're making—something stockbrokers are sometimes loath to divulge. For that complex task, you need the Electronic Investment Organizer, a specialized

calculator (\$69.95 at the Safety Zone, 800 999-3030) that lets you determine how your portfolio is performing. Punch in your purchase price for up to 80 stocks, bonds, mutual funds, or certificates of deposit, then enter the current price. Toltek updates the value and performance of each and cost-averages reinvested dividends as well.

SAIL AWAY. The perfect gift, perhaps, is one you can share in enjoying. If your spouse has been promising to invest your profits for a vacation, consider booking two berths on the 13-day Louis Rukyser Investment Cruise, which will sail into Copenhagen, Oslo, and six other European ports next summer. Each day, passengers get investment advice from *Wall Street Week* regulars such as Mary Farrell and Frank Capriello. The cruise, excluding airfare, starts around \$11,000 per couple, depending on cabin location. Who knows? Maybe you'll pick up enough good tips to pay for the trip—and all of next year's holiday gifts. *Dean Foust*

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| STOCK SHOP WITH PETER LYNCH
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| STREET.COM
www.thestreet.com | Web site with no-holds-barred stock market commentary; \$6.95 a month, \$69.95 a year |
| THE INTELLIGENT INVESTOR | Benjamin Graham's classic 1949 tome on how to value stocks; Harpercollins, \$30 |
| WOLFETECH'S POCKETGENIE
800 965-3832
www.wolfetech.com | A paging device provides real-time quotes, news, and E-mail; \$300 |

com (www.thestreet.com), one of the best sites for understanding how Wall Street works. Acerbic columnist Herb Greenberg skewers highfliers, while hedge fund manager James Cramer files daily dispatches from the trenches.

Street.com is mostly a stock-picker's haven, however. Mutual-fund mavens get more out of Morningstar. While content is free, the real gems are found in Morningstar's premium service for a month or \$99 a year that lets you screen for what meet your standards. Like most other investment sites, Street.com Morningstar shy away from offering advice. One that doesn't is S&P Per-



Movable Feasts For the Holidays

Mail-order food is the perfect holiday prescription for homesick natives from just about anywhere. If your friend from Little Rock has moved to Gotham, you can sate her hankering

for serious barbecue with one phone call to Armstrong's in Helena, Ark. Or if some hardcore New Yorker finds himself in Cheyenne, hoping against hope to savor real lox, make him happy by sending a New York brunch from the quintessen-

tial smoked fish emporium, Russ & Daughters. All over the country, purveyors are keeping American food traditions alive—and transplanted professionals happy—by making and shipping the culinary equivalent of handknit sweaters and scarves (table, page 142).

I have had barbecue sent from more than a dozen joints, but I never became a mail-order barbecue devotee until a caller on National Public Radio alerted me to the whole pork shoulder from Armstrong's (also known as Eddie's). The shoulder ar-

rives ready to be picked clean by a horde of 15 barbecue lovers. It has a crunchy exterior and satiny tender meat inside that tastes like pork confit. I presented one as a gift to Daniel Boulud, chef-owner of Daniel Boulud and the soon-to-be-opened Daniel in New York City. Boulud, who's from the pig-loving French city of Lyons, started attacking it before he put it into the oven, warm (as it's already cooked, it's safe to eat cold). The barbecue doesn't even require the accompanying hot mild barbecue sauces that often come in sauerkraut tins with Eddie's labels pasted on them. Armstrong's ribs, while respectable, are not in the same league as the shoulder.

BREAKFAST PACKAGE. In other Southern tradition, a big breakfast featuring country ham, bacon, sausage, biscuits, and homemade preserves. Although I've never been to the famous Nashville breakfast spot, Loveless Hotel, I have duplicated it. Southern repast many thanks to its mail-order breakfast sampler. Classically salty ham, meaty bacon, sausage, and fabulous preserves (when they're not oddly smokey) will have recipient thinking of moving to Nashville to become a songwriter.

If you're not into pork, Russ & Daughters, among the oldest smoked fish stores in New York City, can give your day off to a round start. Owner Mark Freeman was a lawyer in Brooklyn District Attorney's Office before becoming the third generation of his family to supply New Yorkers with their cherished omelets, and cream cheese. His New York brunches feed 10 hungry folks copious amounts of silky smoked salmon, herring, whitefish, and sturgeon. The cream cheese is made in-house, unlike many brands, and the bagels

FOOD



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crusty enough to crunch when you bite into them. Federman even supplies a pound of rugelach for dessert, although serious rugelach aficionados would probably prefer a buttery batch from Margaret Palca's little bakery in a century-old Italian neighborhood in Brooklyn.

What would any brunch be without butter? Jonathan White's Egg Farm Dairy sampler includes butter so rich and good that I have eaten it with a spoon when my wife wasn't looking. It's made with pasteurized raw cream and churned in small batches. Also in the sampler pack is clabber cream, similar to crème fraîche, and a group of White's superb handmade cheeses.

TEA LEAVES. If you're sending something to a coffee or tea lover, consider the gift packages from Greenwich Village's Porto Rico Importing. Long before Starbucks was a glint in founder Howard Schulz's eye, Peter Longo's grandfather was roasting beans for the coffee-loving artists and writers that populated the streets near the store. Longo still roasts his own beans at a newly opened facility in Brooklyn, so you can be confident of finding fresh, high-quality coffee. Longo's coffee sampler features six half-pound bags; his tea sampler includes eight quarter-pound tea selections and an infuser.

Friends with a penchant for sweeter breakfast beverages will appreciate the Hot Chocolate Creme paste from Le Français Chocolate in Wheeling, Ill. An offshoot of the restaurant in Wheeling of

the same name, Le Français presents its Hot Chocolate Creme in an old-fashioned resealable glass jar. All you need to do is add three spoonfuls to a mug of milk, stir, and stick the concoction in the microwave for 90 seconds. You may never want to resort to Nestle's Quick or even Droste again.

That's not the only gift for chocoholics. Larry Burdick used to supply whimsical chocolate mice, made in his New York tenement apartment, to Bouley, the now-closed four-star restaurant. Burdick has since moved to New Hampshire, but he hasn't lost his sense of humor. His assortments, which include some of those

cute mice, come in wood boxes and house some of the most unusual flavored chocolates you can buy. Who wouldn't like to bite into a truffle made with caramelized honey, herbes de Provence, and cream; or a porto, a dark ganache of chopped hazelnut, cinnamon, lavender, and port wine?

Burdick doesn't make dessert sauces, but Fran Bigelow does at Fran's Chocolates, her Seattle shop. Although her regular dark chocolate sauce is sweet for my taste, the coffee in her espresso caramel sauce cuts the sweetness well. Fran's raspberry sauce, made with fresh Northwest raspberries, sugar, and lemon juice,

shocks with its intense berry flavor.

Jams and dried fruits are ubiquitous mail-order items, but American Spoon Foods has raised the craft of preserving fruit to an art form. Co-owner Justin Rash, whose partner is noted chef Larry Forgione, abandoned an acting career in New York to forage for fruit and mushrooms in Michigan's North Country. Their Michiganian sampler is a well put-together gift box. It comprises "Fruit Perfect" blueberries and cherries (80% fruit), lovely peach and strawberry preserves, candied apples, and chocolate-covered maple creams.

One of America's great food stores, Zingerman's Deli, in Ann Arbor, Mich., has turned out a catalog that's a joy to read and order from. Partner Art Weinzwieg is passionate about olive oil. His oil samplers contain some great olive oils. He's also a self-published book, Weinzwieg's *Guide to Good Olive Oil*, not even tasting kits to allow olive oil lovers to put into practice what they learned from the book.

One thing to remember: Mail-order food packages sometimes can arrive in disarray. Frieda's produce in Los Angeles, for example, will ship exotic fruit, or me a basket with an overripe melon and other fruits spoiled. But for the most part, these mail-order companies are reliable operations.

So forget the sweaters, the slippers, and the slippers this year. Give the folks on your list real American food. It's a gift that will never be returned because it's small. *Ed Le*

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| ARMSTRONG'S PIT BARBECUE
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| EGG FARM DAIRY
800 273-2637 | Everything Sampler (2 lbs. cheese, 1 lb. butter, 8 oz. clabber cream) | \$40 |
| FAT WITCH BROWNIES
212 807-1335 or 888 41-WITCH | Package of 14 brownies (regular, walnut, coffee, etc.) | \$40 |
| FRAN'S CHOCOLATES
800 422-FRAN | Sauce Trio (dark chocolate, raspberry, caramel) | \$18 |
| L. A. BURDICK CHOCOLATES
800 229-2419 | Wood box assortments (16-64 pieces) | \$15 to \$46 |
| LE FRANCAIS
847 541-1317 | 20-oz. jar Hot Chocolate Creme | \$12.95 |
| LOVELESS MOTEL
615 646-0067 or 800 889-2432 | Teaser Package (fruit preserves, sorghum, honey, ham, bacon, sausage) | \$42.95 |
| PORTO RICO IMPORTING
800 453-5908 | Coffee or tea sampler | \$39.95 |
| RUSS & DAUGHTERS
212 475-4880 | New York Brunch (bagels, smoked fish, cream cheese, rugelach for 8 to 10) | \$95 |
| MARGARET PALCA BAKES
718 802-9771 | 1 lb. tin of chocolate, apricot, or raspberry rugelach | \$12 |
| NUESKE'S
800 392-2266 | 2 lbs. applewood-smoked bacon;
4 lbs. ham: | \$19.95;
\$29.95 |
| ZINGERMAN'S
888 636-8162 | Olive oil samplers | \$50 to \$150 |

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Toddler Get Cozy With a PC

Software producers aren't claiming that you introduce your kids to computers

because they're in diapers, you turn them into Silicon Valley geniuses. But they do claim that the programs released this year will stimulate babies' curiosity and imagination.

In general, programs for youngest kids introduce colors and sounds. Those for toddlers develop mouse skills, teach numbers and vocabulary. *Babywow!*, from Wow House, and *JumpStart Baby*, from Knowledge Adventure, claim to be for as young as nine months. *Baby-ROM*, from By-Preiss Multimedia, is aimed at kids six months to 18 months. Knowledge Adventure's *Play With The Teletubbies*, spin-off from the PBS and Nickelodeon series, and *Learning to Read Rabbit's Toddler* raise the age bar to 12-18-month-olds. Other titles list 2 to 4 years as a suitable age range.

Babywow! (\$35, www.babywow.com) features several simple games. "What Is It?" has photographs of a lion, a dog, or other animals covered by boxes. Each time a child hits a key, a box opens to reveal more of the animal, until the whole image is shown. In another exercise, the animal changes

colors when a kid hits a key. *JumpStart Baby* has a variety of exercises, from hide-and-seek to connecting the stars. In "Let's Make Music," a teddy bear leads other characters in nursery rhymes. In "Puzzle Time," children help piece together puzzles, then watch the ob-

ject come to life. Critics claim the program isn't interactive enough: At times, kids can't affect what happens on the screen till Teddy stops speaking.

Many parents wonder how young is too young for kids and computers to meet.

SOFTWARE

"We know that by exposing children very early to books, they begin to look at pictures, see symbols, and understand language," says psychologist Corinne Rupert, who was a consultant on *JumpStart Baby*. "That same process can be applied to computer learning." But Warren Buckleitner, editor of *Children's Software Review* (www.childrensoftware.com), which is written by educators, thinks small children can get as much, if not more, out of Play-Doh or the family cat. Moreover, parents risk turning kids off to PCs if they expose them to concepts they're not ready for. "Some of this software makes it seem like it will stimulate your child, teach a different language, or somehow give an academic advantage," says Buckleitner. "That's a bunch of hokey."

CLOSENESS. At whatever age your kid begins to use a computer, keep your expectations in check. Little ones aren't likely to master a mouse by age 2. Nor will they spend more than a few minutes at a time playing at the screen. And you certainly should not make software a substitute for books, blocks, or crayons. Still, programs can bring parents and kids closer together. Michele Curry, a Web manager at Barnard College in New York, holds her six-month-old son, Lucas, on her lap while he's banging away on the keyboard watching *Babywow!*—hence the name "lapware" to describe the programs.

"It's nice for kids to feel more comfortable around the machines," she says. Even if that means putting your \$2,000 PC at the mercy of small hands. *Edward C. Baig*



KIDDIE PROGRAMS

| PROGRAM | AGE | COMMENTS |
|---|-------------------|---|
| <i>PLAY WITH THE TELETUBBIES</i>
KNOWLEDGE ADVENTURE/BBC | 1 to 4 years | Characters from the PBS series teach early computer skills, \$30 |
| <i>READER RABBIT'S TODDLER</i>
LEARNING CO. | 18 mos. to 3 yrs. | A smiling train introduces the alphabet and words, \$30 |
| <i>SESAME STREET LEARNING SERIES</i>
<i>TODDLERS DELUXE CREATIVE WONDERS</i> | 2 to 4 years | Three CD-ROMs with activities for mouse skills and vocabulary, \$40 |

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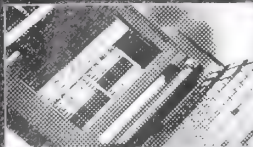
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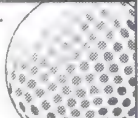
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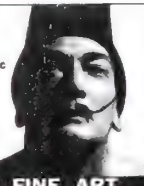
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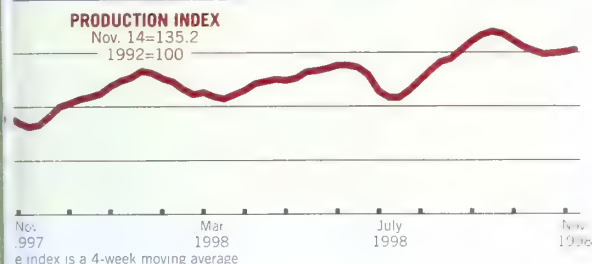
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Business Week Index

PRODUCTION INDEX

Change from last week: 0.1%
Change from last year: 5.4%



The production index rose in the week ended Nov. 14. Before calculation of our week moving index, the index increased 0.4%, to 135.6, from 135 in the previous week. After seasonal adjustment of the data, output of steel, autos, trucks, and lumber posted gains. On the downside, electricity, oil, coal, and air-freight traffic all fell slightly.

LEADING INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|------------|--------------|
| STOCK PRICES (11/20) S&P 500 | 1163.55 | 1125.72 | 24.3 |
| GOVERNMENT BOND YIELD, Aaa (11/20) | 6.31% | 6.42% | -7.5 |
| MONEY SUPPLY, M2 (11/9) billions | \$4,373.1 | \$4,362.3r | 8.9 |
| REAL ESTATE CLAIMS, UNEMPLOYMENT (11/13) thous | 332 | 323r | 0.3 |
| MORTGAGE APPLICATIONS, PURCHASE (11/20) | NA | 295.8 | NA |
| MORTGAGE APPLICATIONS, REFINANCE (11/20) | NA | 1,723.0 | NA |

Sources: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Ind. Assn. (Index: March 16, 1990=100)

INTEREST RATES

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|--|-------------|-------------|----------|
| GOVERNMENT FUNDS (11/23) | 4.58% | 4.61% | 5.55% |
| COMMERCIAL PAPER (11/23) 3-month | 4.97 | 5.26 | 5.71 |
| CERTIFICATES OF DEPOSIT (11/24) 3-month | 5.18 | 5.16 | 5.80 |
| MORTGAGE (11/20) 30-year | 7.03 | 7.08 | 7.36 |
| STABLE MORTGAGE (11/20) one-year | 5.82 | 5.74 | 5.71 |
| LIBOR (11/20) | 7.75 | 7.75 - 8.00 | 8.50 |

Sources: Federal Reserve, HSH Associates, Bloomberg Financial Markets

data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

SURVEY

Friday, Dec. 1, 10 a.m. EST ▶ The National Association of Purchasing Management's index for November probably fell to 47.9%, from October's 48.3%, falling to the median projection of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. In effect, the forecast means that the NAPM index has been below 50% for five consecutive months, a sign that the manufacturing sector is contracting.

CONSTRUCTION SPENDING

Friday, Dec. 1, 10 a.m. EST ▶ Construction probably rose 0.5% in October, after a 0.4% gain in September. That's

suggested by the unexpected 7.3% jump in homebuilding for the month.

LEADING INDICATORS

Tuesday, Dec. 1, 10 a.m. EST ▶ The Conference Board's index of leading indicators likely rose 0.2% in October, after no change in either August or September. A rebound in stock prices helped to lift the index.

NEW HOME SALES

Wednesday, Dec. 2, 10 a.m. EST ▶ New single-family homes probably sold at an annual rate of 840,000 in October. If so, that would be the first rise in sales since June. In September, home buying slipped 1%, to 822,000 homes purchased.

PRODUCTION INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|-----------|--------------|
| STEEL (11/21) thous. of net tons | 1,892 | 1,864# | -13.1 |
| AUTOS (11/21) units | 119,307 | 108,316r# | -6.9 |
| TRUCKS (11/21) units | 146,890 | 121,218r# | 3.5 |
| ELECTRIC POWER (11/21) millions of kilowatt-hrs. | NA | 61,761# | NA |
| CRUDE-OIL REFINING (11/21) thous. of bbl./day | NA | 14,738# | NA |
| COAL (11/14) thous. of net tons | 21,801# | 22,001 | 6.6 |
| LUMBER (11/14) millions of ft. | 501.1# | 481.3 | 4.3 |
| RAIL FREIGHT (11/14) billions of ton-miles | 27.8# | 28.0 | 4.5 |

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPAl, SFPAl, Association of American Railroads

PRICES

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|----------|--------------|
| GOLD (11/24) \$/troy oz. | 296.450 | 296.500 | 1.2 |
| STEEL SCRAP (11/23) #1 heavy, \$/ton | 85.50 | 85.50 | -40.4 |
| COPPER (11/20) ¢/lb. | 74.9 | 75.3 | -14.1 |
| ALUMINUM (11/20) ¢/lb. | 62.8 | 62.5 | -19.3 |
| COTTON (11/20) strict low middling 1-1/16 in., ¢/lb. | 65.17 | 68.34 | -3.9 |
| OIL (11/24) \$/bbl | 11.66 | 12.07 | -37.3 |
| CRB FOODSTUFFS (11/23) 1967=100 | 195.84 | 205.66 | -21.3 |
| CRB RAW INDUSTRIALS (11/23) 1967=100 | 267.57 | 267.08 | -15.9 |

Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|--|-------------|----------|----------|
| JAPANESE YEN (11/24) | 120.93 | 121.35 | 128.60 |
| GERMAN MARK (11/24) | 1.71 | 1.67 | 1.77 |
| BRITISH POUND (11/24) | 1.66 | 1.67 | 1.68 |
| FRENCH FRANC (11/24) | 5.73 | 5.60 | 5.92 |
| ITALIAN LIRA (11/24) | 1690.5 | 1649.5 | 1734.5 |
| CANADIAN DOLLAR (11/24) | 1.55 | 1.56 | 1.42 |
| MEXICAN PESO (11/24) | 9.915 | 9.935 | 8.125 |
| TRADE-WEIGHTED DOLLAR INDEX (11/24) | 108.4 | 107.8 | 108.4 |

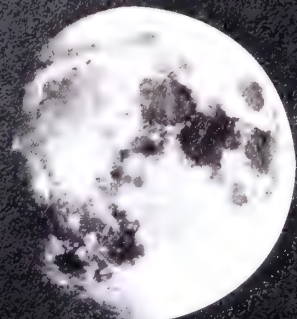
Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

EMPLOYMENT

Friday, Dec. 4, 8:30 a.m. EST ▶ The S&P MMS median forecast expects that nonfarm payrolls grew by a solid 160,000 in November, following a 116,000 increase in October. However, manufacturing jobs probably declined by another 22,000, bringing the total number of factory workers laid off so far in 1998 to 215,000. November's unemployment rate is expected to remain at October's 4.6% reading.

FACTORY INVENTORIES

Friday, Dec. 4, 10 a.m. EST ▶ Manufacturers probably increased their inventories by a small 0.2% in October, after seeing no change in September.



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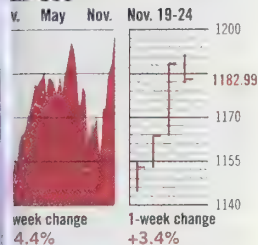
Z

Zenith Electronics 10
Zingerman's Deli 140

Investment Figures of the Week

STOCKS

S&P 500



MARKET COMMENTARY

A bull market made a return appearance, with U.S. stocks surging to all-time highs. The Dow Jones industrial average added 215 points on Nov. 23, rising to 9374—smashing the previous record set on Nov. 17. A spate of takeovers, including Deutsche Bank's announcement to buy Bankers Trust, fueled the market rally. Tech stocks were particularly strong, aided by America Online's merger talks with Netscape. Stocks gave back some of their gains on Nov. 24, but bonds and the dollar remained strong.

U.S. MARKETS

| | Latest | % change
Week | % change
Year |
|---------------------------|--------|------------------|------------------|
| Dow Jones Industrials | 9301.2 | 2.9 | 19.1 |
| NASDAQ Combined Composite | 1965.9 | 3.6 | 23.7 |
| S&P MidCap 400 | 355.9 | 1.2 | 11.3 |
| S&P SmallCap 600 | 166.6 | 2.5 | -5.6 |
| S&P SuperComposite 1500 | 248.8 | 3.2 | 21.9 |

SECTORS

| | Latest | % change
Week | % change
Year |
|---------------------------|--------|------------------|------------------|
| Bloomberg Information Age | 419.1 | 4.3 | 42.2 |
| S&P Financials | 131.4 | 5.7 | 16.8 |
| S&P Utilities | 258.2 | 0.6 | 17.7 |
| PSE Technology | 402.9 | 3.7 | 33.9 |

FOREIGN MARKETS

| | Latest | % change
Week | % change
Year |
|-----------------------|----------|------------------|------------------|
| London (FT-SE 100) | 5798.3 | 5.9 | 19.2 |
| Frankfurt (DAX) | 4958.8 | 5.5 | 28.8 |
| Tokyo (NIKKEI 225) | 15,164.6 | 3.9 | -4.4 |
| Hong Kong (Hang Seng) | 10,851.7 | 6.2 | 5.1 |
| Toronto (TSE 300) | 6570.3 | 3.6 | -0.9 |
| Mexico City (IPC) | 4032.2 | -0.7 | -15.8 |

FUNDAMENTALS

| | Latest | Week ago | Year ago |
|-----------------------------------|--------|----------|----------|
| S&P 500 Dividend Yield | 1.32% | 1.40% | 1.61% |
| S&P 500 P/E Ratio (Last 12 mos.) | 30.8 | 29.5 | 23.9 |
| S&P 500 P/E Ratio (Next 12 mos.)* | 23.2 | 22.2 | 18.7 |
| First Call Earnings Revision* | -4.03% | -4.35% | -0.98% |

TECHNICAL INDICATORS

| | Latest | Week ago | Reading |
|----------------------------------|--------|----------|----------|
| S&P 500 200-day average | 1086.7 | 1083.6 | Positive |
| Stocks above 200-day average | 37.0% | 32.0% | Positive |
| Options: Put/call ratio | 0.46 | 0.54 | Negative |
| Insiders: Vickers Sell/buy ratio | 0.62 | 0.52 | Positive |

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

| | Last month% | Last 12 months% |
|-------------------------|-------------|---------------------------------|
| Invest. Banking/Brkrge. | 34.5 | Communications Equip. 77.5 |
| HMOs | 26.9 | Genl. Merchandise Chains 66.3 |
| Semiconductors | 26.5 | Specialty Appar. Retailers 65.4 |
| Transportation Services | 24.1 | Drugs 61.5 |
| Communications Equip. | 22.7 | Automobiles 59.5 |

WORST-PERFORMING GROUPS

| | Last month% | Last 12 months% |
|-------------------------|-------------|-------------------------------|
| Oil & Gas Drilling | -17.0 | Oil & Gas Drilling -61.2 |
| Oil Exploration & Prod. | -6.8 | Oil-Well Equip. & Svcs. -35.6 |
| Oil-Well Equip. & Svcs. | -3.5 | Leisure Time -34.7 |
| Domestic Oil | -1.8 | Oil Exploration & Prod. -32.1 |
| Pollution Control | -1.1 | Machine Tools -31.1 |

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

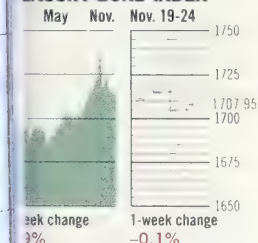
| | Price | 1-month change |
|-------------------------|---------|----------------|
| AT&T | 63 7/8 | -3 7/8 |
| Apple Computer | 36 1/4 | -1 1/16 |
| Telefonos de Mexico-ADR | 50 1/4 | -3 1/4 |
| BEA Systems | 13 3/4 | -5 1/4 |
| Lockheed Martin | 108 3/8 | -2 11/16 |
| Chevron | 80 7/16 | -1 1/8 |

Decline ahead? Stocks with most significant selling on price strength

| | Price | 1-month change |
|---------------|---------|----------------|
| Dell Computer | 65 7/8 | 3 7/8 |
| Cisco Systems | 76 7/16 | 14 19/16 |
| MCI WorldCom | 58 9/16 | 5 15/16 |
| Amazon.com | 218 | 96 9/16 |
| Biogen | 82 7/8 | 12 1/4 |
| Inktomi | 146 7/8 | 61 3/8 |

INTEREST RATES

EASURY BOND INDEX



Data: Bloomberg Financial Markets

KEY RATES

| | Latest | Week ago | Year ago |
|---------------------------|--------|----------|----------|
| MONEY MARKET FUNDS | 4.80 | 4.83 | 5.18 |
| 90-DAY TREASURY BILLS | 4.61 | 4.42 | 5.23 |
| 6-MONTH BANK CDS | 4.47 | 4.47 | 5.20 |
| 1-YEAR TREASURY BILLS | 4.59 | 4.52 | 5.49 |
| 10-YEAR TREASURY NOTES | 4.83 | 4.87 | 5.82 |
| 30-YEAR TREASURY BONDS | 5.21 | 5.30 | 6.01 |
| LONG-TERM AA INDUSTRIALS | 6.15 | 6.28 | 6.55 |
| LONG-TERM BBB INDUSTRIALS | 7.08 | 7.27 | 6.97 |
| LONG-TERM AA TELEPHONES | 6.51 | 6.59 | 6.96 |

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

| | 10-yr. bond
Latest week | Last week | 30-yr. bond
Latest week | Last week |
|-----------------------|----------------------------|-----------|----------------------------|-----------|
| GENERAL OBLIGATIONS | 4.17% | 4.19% | 4.84% | 4.86% |
| PERCENT OF TREASURIES | 86.38 | 86.33 | 92.96 | 92.41 |
| TAXABLE EQUIVALENT | 6.04 | 6.07 | 7.01 | 7.04 |
| INSURED REVENUE BONDS | 4.29 | 4.31 | 5.08 | 5.10 |
| PERCENT OF TREASURIES | 88.87 | 88.80 | 97.57 | 96.97 |
| TAXABLE EQUIVALENT | 6.22 | 6.25 | 7.36 | 7.39 |

MUTUAL FUNDS



Data: Morningstar, Inc.

EQUITY FUNDS

| Leaders | Four-week total return | % | Laggards | Four-week total return | % |
|-----------------------------|------------------------|---|------------------------------|------------------------|---|
| Amerindo Technology D | 42.9 | | Profunds UltraShort DTC Inv. | -26.3 | |
| Profunds UltraOTC Investor | 33.2 | | Profunds UltraBear Serv. | -18.6 | |
| Munder NetNet B | 31.5 | | Fidelity Sel. Energy Serv. | -16.5 | |
| Matthews Korea A | 27.1 | | Rydex Energy Svcs. Inv. | -16.2 | |
| TCW/DW Mid-Cap Equity D | 25.8 | | Oppenheimer Real Asset C | -14.4 | |
| Leaders | 52-week total return | % | Laggards | 52-week total return | % |
| Amerindo Technology D | 65.6 | | Lexington Troika Russia | -82.0 | |
| Transamerica Aggr. Gr. Inv. | 63.2 | | Eaton Vance Wwde. Dv. Res. B | -49.4 | |
| Flag Investors Commun. A | 58.5 | | Frontier Equity | -48.0 | |
| Dreyfus Technology Growth | 56.8 | | Dreyfus Aggressive Growth | -47.5 | |
| Northern Technology | 54.0 | | Fidelity Sel. Energy Serv. | -47.0 | |

EQUITY FUND CATEGORIES

| Leaders | Four-week total return | % | Laggards | Four-week total return | % |
|------------------|------------------------|---|----------------------------|------------------------|---|
| Technology | 19.1 | | Natural Resources | -0.9 | |
| Communications | 14.8 | | Real Estate | 1.9 | |
| Mid-cap Growth | 12.8 | | International Hybrid | 3.9 | |
| Large-cap Growth | 12.6 | | Utilities | 5.4 | |
| Latin America | 12.2 | | Domestic Hybrid | 5.8 | |
| Leaders | 52-week total return | % | Laggards | 52-week total return | % |
| Communications | 29.0 | | Latin America | -27.5 | |
| Large-cap Growth | 24.3 | | Natural Resources | -25.4 | |
| Utilities | 20.0 | | Diversified Emerging Mkts. | -24.3 | |
| Technology | 20.0 | | Pacific/Asia ex-Japan | -16.1 | |
| Large-cap Blend | 18.6 | | Real Estate | -14.4 | |

as of market close Tuesday, Nov. 24, 1998, unless otherwise indicated. Industry groups and mutual fund returns are as of Nov. 23. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

as of market close Tuesday, Nov. 24, 1998, unless otherwise indicated. Industry groups and mutual fund returns are as of Nov. 23. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

AN ERA OF UTTER UNPREDICTABILITY

Can an entire nation get whiplash? You bet. Just look around. In the flash of a few months, the stock market goes from euphoria to panic back to euphoria again, taking millions along for the angst-ridden ride. One day, there's a liquidity crisis. The next moment, companies are asking, "What credit crunch?" In September, the President looks like he might be impeached. By November, Newt Gingrich is out on his butt. TV pundits predict a major sweep for Republicans in Congressional elections. Voters prove them hopelessly wrong. In the fall, America appeared to be entering an Age of Uncertainty. As the countdown for yearend 1998 begins, it is clear that the U.S. is really in an Era of Utter Unpredictability.

What's so confusing? Take your pick. The stock market hits new highs in July and then drops 1,800 points just like that. Everyone is shouting "Sell! Sell!" because there's a meltdown in the financial system. But it turns out there isn't. Spreads open and capital markets choke, but banks pick up the slack and loans keep flowing. No crisis. So the market switches gears and levitates up to a record high in the space of seven weeks. Wait a minute. Don't stock prices depend on profits? Yet the Commerce Dept. reports that after-tax corporate profits are down for three quarters running. But are they? Grab a calculator, check the stats, and it turns out that the median company in the S&P 500 index actually reported a nice 9% year-over-year gain in the third quarter (page 122). So the market isn't crazy, right? Whiplash.

Want more? Take mergers and acquisitions. They were supposed to be dead. The cycle was over. There wasn't any

financing left. Then came Merger Monday. No sooner had window of opportunity opened again, with the Dow Jones industrial average blasting into new territory, than mergers totaling more than \$42 billion poured through in a single day. Some 22 companies said that they were talking about coming together in some fashion, and a record 10 deals exceeded \$1 billion. Whiplash.

Or consider Asia. It is supposed to be in a deflationary recession so bad it's the closest thing to the Great Depression. Conventional wisdom holds that nothing can be done. Japan pulls itself out of eight years of stagnation. China is on the verge of devaluing, making matters worse. Forget all that. Word is that Asia has miraculously "bottomed," with any help from Japan. Exports are up, manufacturing is rising. The Hang Seng and other Asian stock markets are buoyant. China never stopped growing. The Asian Depression? Over. Whiplash.

The U.S. is an even greater surprise. Economic growth was supposed to be slowing down by now. Asia, inventing a credit crunch, the dollar—take your pick for a reason why it isn't happening. Third-quarter gross domestic product came in at a galloping 3.9%, practically double the conservative forecast of 2.2% at the beginning of the quarter. And the fourth quarter is looking pretty good, too. Where are all those tired consumers, all spent out, in hock, and ready to call it quits? They're in the stores buying up a storm, and paying as clams. Whiplash.

In unpredictable times such as these, today's optimism may be just as fleeting as yesterday's pessimism. The most sensible stance is caution. And humility.

THE MICROSOFT FACTOR

As the government's antitrust case against Microsoft Corp. proceeds in Washington, the Internet may already be undermining the company's dominance. A strong stock market is providing the means to finance a series of deals that is changing the structure of the Net, the latest involving America Online, Netscape Communications, and Sun Microsystems.

Just a short time ago, the Net appeared to be locking up. Everywhere on the Net, Microsoft appeared to be leveraging its 90% share of the operating-system market into controlling other businesses. No longer. In recent months, Compaq and Dell have decided to take control of their own "first boot" screens and now channel consumers to their portal partners, such as Excite. Computer makers are designing PCs with specific buttons that channel consumers directly into their partners' Web sites. Net service providers, for their part, feel freer to offer both Netscape and Explorer browsers and a variety of content (page 26).

In the space of a year or so, the Net landscape has become

more open, more dynamic, and more competitive. The Netscape Communications-Sun Microsystems deal highlights the change. The combo will give Microsoft and others stronger competition in the booming field of electronic commerce, expected to reach \$3.5 trillion by 2002, as well as in new media. Competitive prospects for both Netscape's browser and Java software programming language are much improved.

Something has changed in the high-tech *zeitgeist*. Certain new technology and expanding markets on the Net are part of the explanation. But the entire competitive environment in technology may also be improving thanks to the Microsoft case, emboldening rivals to compete and innovate without fear of retribution. Too many PC makers and Internet service providers have broken free to wheel and deal and innovate since Justice launched the case to believe it is simply a matter of time. Silicon Valley mavens, forced to air their grievances against Microsoft after years of private complaint, now are emboldened to act.

Paradox:



\$20,495*

It's tough to categorize the 1999 Dodge Intrepid. On the one hand, it has a lease rate that's lean and a price tag that's mid-size. Yet Intrepid offers so much interior space that it's officially recognized as a large car by the EPA. Its standard aluminum engine delivers a stingy EPA estimated mpg of 21 city, 30 highway, yet it generates a stout 100 horsepower. That's more power per liter than any regular-fuel V-6 engine available today. And while Intrepid's ride is supple, its handling is crisp and controlled. Large car, mid-size car, family car, luxury car, sports sedan.

That's not a paradox, it's an Intrepid. Dodge Intrepid. We're changing everything. Again.

Intrepid  The New Dodge

800-4-A-DODGE or www.4adodge.com

*Base MSRP excludes tax. Color shown \$200 extra. Always use seat belts. Remember a backseat is the safest place for children.

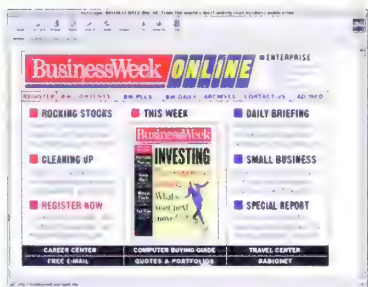


BusinessWeek

EMBER 14, 1998

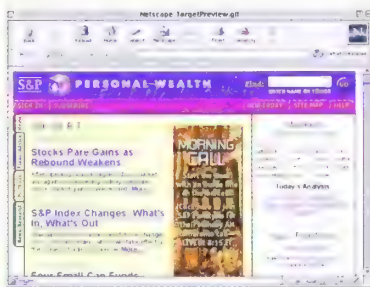
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BusinessWeek

SEPTEMBER 14, 1998

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Stocks**

What are
they really
worth?

**Exxon
Mobil**

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hape
industry

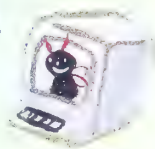


The Euro
Special report
on its
launch

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THE WILD WORLD OF E-COMMERCE

CEO
JEFF BEZOS



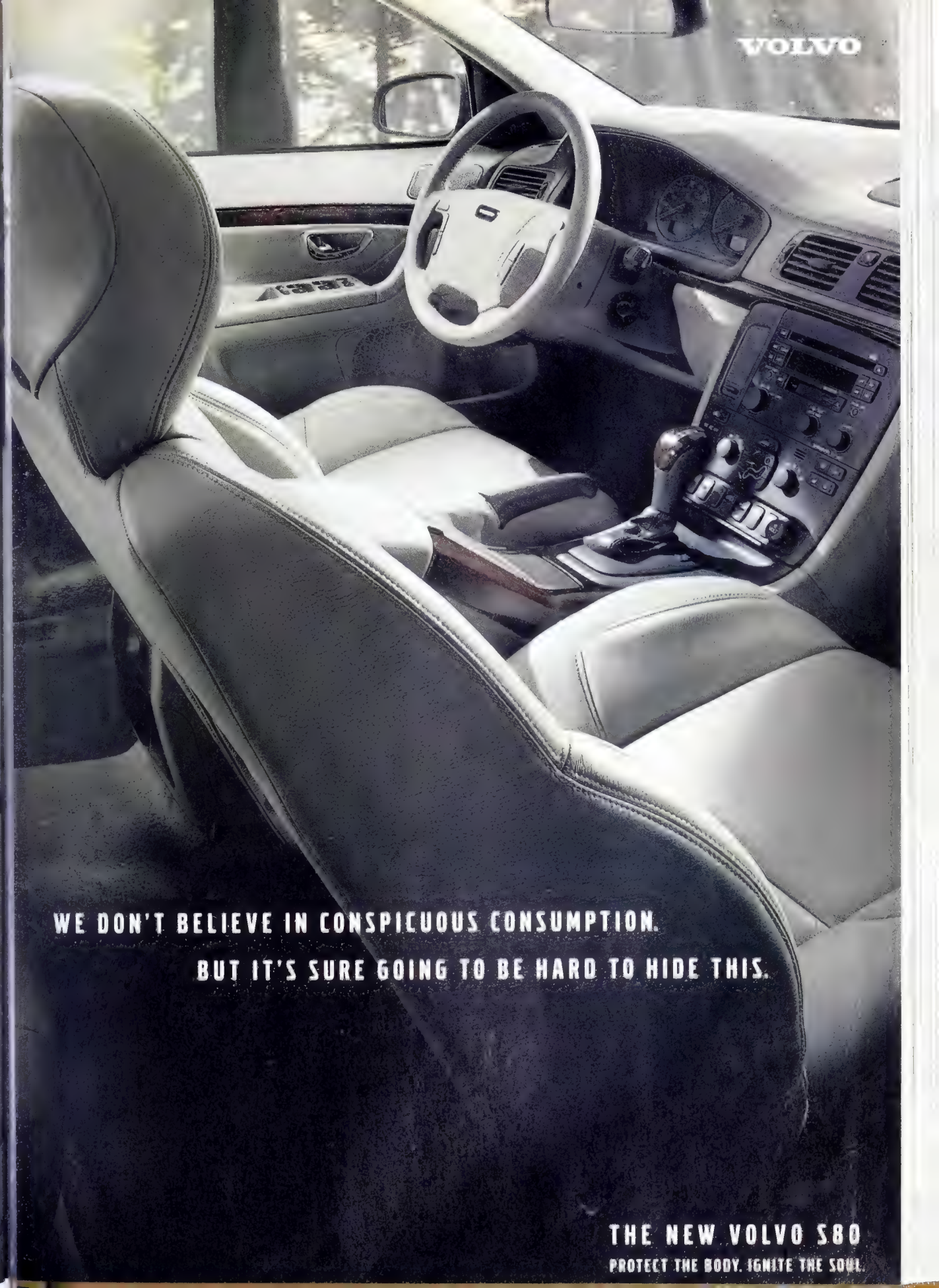


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COMPUTERS, COMMUNICATIONS, MICROELECTRONICS



A black and white photograph showing the front interior of a Volvo S80. The view is from the passenger side looking towards the driver's seat. The leather-upholstered seats have visible stitching. The dashboard, steering wheel with the Volvo logo, and center console with the gear shifter are visible. The car is parked, with trees visible through the windows.

VOLVO

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THE NEW VOLVO S80
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COVER STORY

AMAZON.COM

Sales, marketing, distribution, dress codes—Amazon is breaking corporate molds

BusinessWeek

DECEMBER 14, 1998

NET WORTH

Putting a price on cyber stocks



Cover Story

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By pioneering the art of selling online, Amazon is redefining retailing. Each employee generates three times the revenue that bookstore clerks can, and its vast and growing database of customer interests is a cross-marketer's dream. That has earthbound retailers worried

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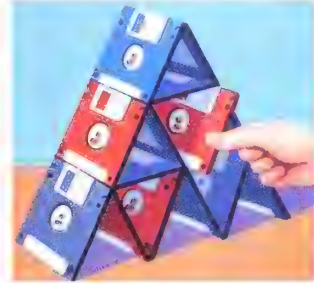


BUM RAP
Not all
hedge funds
are high-risk
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Up Front

EDITED BY ROBERT McNATT

PAPER PLAYS

NOT BANKING ON BANKRUPTCY—YET

HERE'S ANOTHER POSSIBLE way to make money on financial disaster. It's the Quarterly Bankruptcy Index futures contract, a security whose value is based on the number of bankruptcy filings by U.S. consumers. Designed as a hedge against loan losses by credit-card issuers, finance companies, and the like, QBI was introduced at the Chicago Mercantile Exchange on Nov. 3. But despite record levels of consumer bankruptcy, not a single contract had been traded by early December.

Not that the big boys are



against dealing in John Q. Public's economic failure. It's just that as with most new futures contracts, no one wants to be the first to set a price on it. "This is cutting-edge stuff," says David Willey, treasurer for credit-card issuer Capital One Financial, which helped develop QBI with the Merc. "It's going to take a while to build up steam."

QBI works because bankruptcies correlate highly with badly overdue consumer loans. Since the contract goes up in value as bankruptcies rise, lenders can offset loan losses. The caveat: Congress may make declaring bankruptcy tougher. That would wreak havoc with valuing the QBI. *Andrew Osterland*

UNION DUES

GRAD STUDENTS VS. CALIFORNIA

THE MIGHTY UNIVERSITY OF California may soon be paralyzed by striking grad students. On Dec. 1, 9,000 graduate teaching assistants at eight UC campuses mounted their first systemwide walk-out, mainly aimed at gaining recognition for their union.

Grad students, who conduct about 60% of undergraduate instruction, have mounted unsuccessful strikes at individual UC campuses before. But this is the first coordinated strike across the state.

If the walkout succeeds, it will be a major blow to the university, which has waged a legal battle against efforts by the students to unionize since 1983. The university says it refuses to recognize the union, which is affiliated with the United Auto Workers, because its members are primarily students, not employ-



WALKOUT: Statewide strike

ees. But other grad-student unions have recently won bargaining rights at the Universities of Massachusetts, Iowa, and Kansas.

Beyond the issue of union recognition, Ricardo Ochoa, president of the union's Berkeley local, notes that the academics walking the line basically want the same thing that other workers want: better working conditions and more money. *Aaron Bernstein*

TALK SHOW "Maybe you joined the company because it was a cool company. We are not changing any of that"

—America Online CEO Steve Case reassuring Netscape employees, now that Netscape will be a division of AOL

PROFIT & GLOSS

A PENNY EARNED IS A PENNY FUDGED?

WANT MORE EVIDENCE THAT investors aren't getting the straight dope from companies about earnings? In a study of third-quarter results at 632 companies, with per-share results ranging from a 9¢ loss to a 9¢ profit, Mark Nigrini, an accounting professor at Southern Methodist University, found a pattern showing that some companies may be "massaging" earnings.

Among those 632, all chosen for their low earnings-per-share postings, 57 reported earnings of 1¢ per share—more reports than any other figure, profit or loss. And far more than reports of a penny-a-share

loss (only 16) or a breakeven (24). Nigrini says that's an accident. "Companies don't want to report a loss," he notes, adding that a loss is a huge stigma for a company's profitability. So companies stretch the rules to show a profit—even if it's only a penny per share.

Stretching is easier for larger companies, which can tweak such items as provisions for bad debts or obsolete inventory. Of the 57 companies, Nigrini's big penny-per-share company is Teradyne, a major write-off in quarterly sales of \$335 million. CFO Jeffrey H. kiss says that while such judgments are always involved in making provisions, the company had not changed any valuation practices to influence earnings.

ONE CENT PER SHARE IS THE MAGIC NUMBER

| EPS | NO. OF COMPANIES |
|-------|------------------|
| -0.01 | 16 |
| 0.00 | 24 |
| +0.01 | 57 |

DATA: M.J. NIGRINI

SHOW BIZ

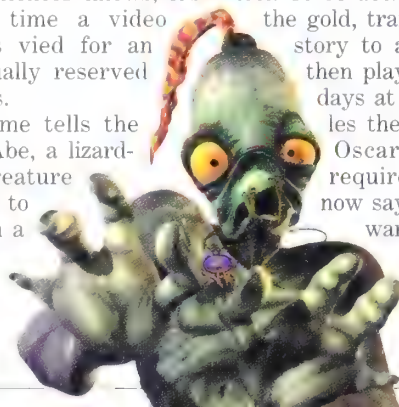
THE NEXT SPIELBERG MAY BE IN THE ARCADE

NEVER MIND "LIGHTS, CAMERA, action!" How about "Chip, monitor, joystick!" The fast route to an Oscar may not be film school but a GameBoy. GT Interactive, best known for its hit game *Duke Nukem 3-D*, is submitting another game, *Oddworld: Abe's Exoddus*, for an Academy Award. The category is animated short. As far as the Academy of Motion Picture Arts & Sciences knows, it's the first time a video game has vied for an honor usually reserved for movies.

The game tells the story of Abe, a lizard-faced creature who tries to shut down a

brewery that has enslaved his people. It was designed by software developer world inhabitants, whose designers animated those lar bears in the Coca-Cola ads. "When they piece together all of the full-motion videos, they said, 'Look at this. It has high-quality graphics, it has a gripping story line. It's like a movie,'" says GT spokesman Dan Nett. So GT decided to go for the gold, transferring the story to a film, which then played for 10 days at a Los Angeles theater to meet Oscar-nomination requirements. Now says other movie developers are interested in Oscar entries.

ABE: Thank-you speech?



.COM

Up Front



THE GLOBAL ECONOMY

HOLDING THE FRIES—AT THE BORDER

YOUR STOMACH STARTS growling and you want a quick fix, so you head to the nearest Golden Arches for a Big Mac and...rice?

Rice is what you'll probably end up with these days if your local Mickey D's is in Indonesia. With the collapse of the rupiah over the past year, potatoes, the only ingredient McDonald's imports to the island nation, have quintupled in price. That

means rice is turning up with increasing frequency as an alternative to the french fry. In September, McDonald's introduced a rice and eggs dish, and its value meals now consist of just chicken and a drink—but no taters. It's not hard to fathom why fries are an endangered menu item says Jack Greenberg, CEO of McDonald's: "No one can afford them."

The company has long tailored menus at its 24,000 worldwide restaurants to local tastes, though not out of economic distress. In other Asian markets, weakened currencies have made it cheaper to build new outlets: 2,000 are anticipated over the next three years. But Indonesia's situation is so disastrous, says Greenberg, that McDonald's will close 30 of its 100 stores there. Even for Mickey D's, that's still hard to swallow. *David Leonhardt*

GETTING AND SPENDING

LIFT TICKETS THAT DEFY GRAVITY

STRAP ON THOSE BRIO goggles and Strolz ski boots at your peril: The price hike this winter for a peak-season, one-day lift ticket is steeper than the Rockies. Aching for

Skiers, meanwhile, are reacting icily to the increases. Inflation, they note, is only 1.5%. But, then, as *Ski* magazine's editor, Andrew Bigford, says: "Anybody who buys a full-day, open-rate lift ticket is an idiot." Destination resorts estimate that only 10% of skiers do this, and the numbers decline each year. Why? Credit multiple-day ticketing and ski resorts' new

"frequency" cards, which reward skiers for using credit cards and loading up on services at a single resort. The industry is actively trying "to attract people of all ages and incomes," Bigford points out. Besides, he says, compared with a round of golf at Pebble Beach (\$175 to \$225), eight hours at Vail is a steal. *Sandra Dallas*



ROCKY MOUNTAIN HIGH: Cost, that is

the slopes of Vail? Expect a 9% increase, from last year's \$56, to \$61. Hoping to touch the sky at Heavenly, in California? That's a 6% rise, to \$52, while out east, Killington, Vt., is up 4%, to \$52. Telluride, Colo., has risen 4%, to \$55. And Aspen? The resort won't even divulge its top day rate by phone. Maybe it's embarrassed.

DRAWN & QUARTERED



RETAIL REVELRY

BICYCLES BUILT FOR BARGAIN HUNTERS

HERE COMES DEFLATION down the chimney. This holiday season, big retailers are offering prime kids' gift material, some entry-level bicycles, at eye-poppingly low prices. That's sure to make a lot of parents happy—unless mom and pop work in a bicycle factory.

In November, Target Stores advertised bikes in some markets for as little as \$38. Then Wal-Mart Stores jumped in, cutting the price of violet-and-pink Sea Star bikes for girls and the black-and-red Rock-It for boys to \$37.88. And by early December, Kmart had lowered prices to \$34.99.

Bikemakers such as Miamisburg (Ohio)-based Huffy

would love to put the on sliding prices. But face a flood of cheap imports. Says Assistant Treasury Secretary Paul Fisher: "That's a lot of worldwide excess capacity." So Huffy will lose more than 1.5 million



this year—up from none five years ago. Those imports were a factor in closing its plant in Na, Ohio, this year, which lost about 1,000 jobs. Bikes be cheap, but they reach consumers with a cost. *Robert A.*

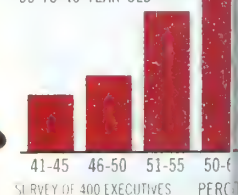
THE BIG PICTURE

THE JOB-HUNTIN' BLUES

Age bias is still a fact of life in Corporate America. A survey of 35-to-60-year-old job-seekers showed that the older they were, the fewer interviews they got, and the longer it took them to find a job.



JOB SEARCH TIME
PERCENT INCREASE BY
AGE COMPARED TO A
35-TO-40-YEAR-OLD



FOOTNOTES Americans who cannot remember the gifts they received for Christmas last year: 37%

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Suffice it to say, there's a lot going on behind the dot in .com.

What can we .com for you?



man Arthur Levitt Jr. sees as a threat to the credibility of the U.S. financial reporting system. In fact, MCI Com originally wanted this write-off be \$7 billion, but the SEC insisted it be reduced to "only" \$3.2 billion. The earnings game includes not only the management of analysts' expectations but also the management of earnings figures themselves.

John P. McAllister
Professor of Accounting
Kennesaw State University
Woodstock, Ga.

IS 'VOCATIONAL SCHOOL' A MISNOMER

Write to correct the characterization of New York Institute of Technology as a "vocational" school in "Steve movie mogul" (Cover Story, Nov. 23). NYIT is a comprehensive, regional, accredited college. More than 100 academic disciplines and programs are offered by NYIT's eight schools, leading to bachelor's, master's, and doctor of philosophy degrees. In addition, campuses are located on Long Island and in New York City and satellite campuses in Florida, the college has a strong growing international presence, with campuses in Taiwan and China. As you know, NYIT's rich research history gave rise to many technology-based activities such as computer graphics.

Matthew Schure, President
New York Institute of Technology
New York

MINIMUM WAGES VS. MINIMUM SKILLS

Two important items were left out of the "minimum wage—for good" article: Analysis & Commentary, Nov. 23. First, it appears that rhetoric promoted by Senator Edward Kennedy (D-Mass.) and other strong supporters of the minimum wage have set the parameters of the debate. It is critical that the public understands exactly what the minimum wage is. It has been estimated that over 80% of those who are individuals living at home with two or more relatives, workers in dual-income households, or single wage earners with no kids.

Second, it is difficult to believe that the public, and especially businesses, will support indexing a federal mandate without any review or discussion. Poor public policy to allow bureaucratic exclusive control of a mandate directly affects the way companies are allowed to operate. Proponents of indexing the minimum wage must keep in mind that businesses pay wages commensurate with skills. Increasing the mini-

mum wage is not synonymous with increasing the skill level of workers.

Bryan J. Bucklew
Vice-President
Governmental Affairs
Dayton Area Chamber of Commerce
Dayton

TAIWAN'S GOVERNING PARTY ISN'T PICKING ANY FIGHTS

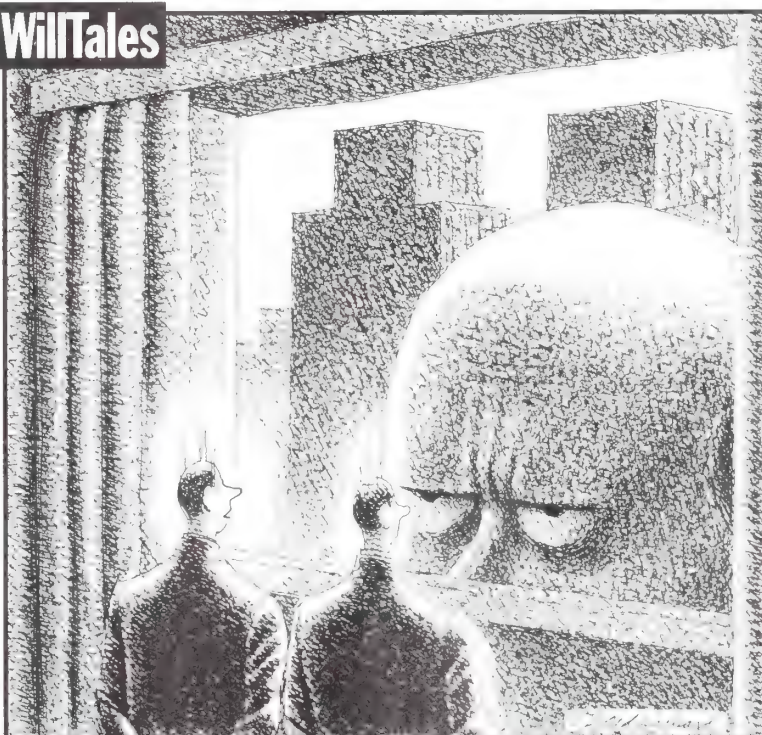
I would like to commend you on the observant and thorough coverage of

Taiwan's coming elections and your grasp of the issues ("The man China fears," International Economics, Nov. 23). However, I am concerned that your description of the Democratic Progressive Party as a crisis-provoking party that could incite confrontation between Beijing and Washington raises unwarranted anxiety, both domestically and internationally.

Ever since the founding of the DPP 12 years ago, Mayor Chen Shuibian and other DPP leaders have champi-

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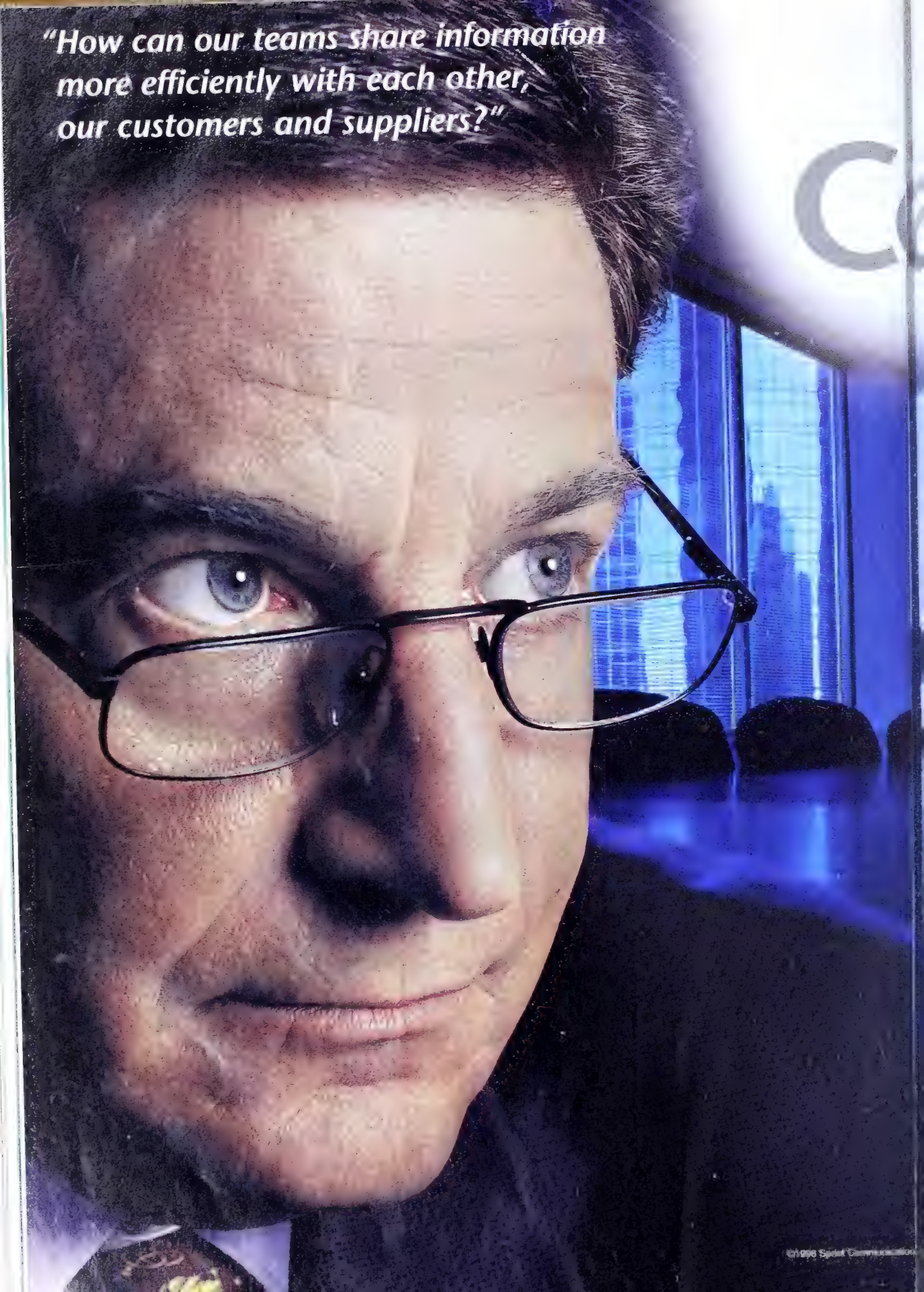
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see page 174

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Taiwan. Today, the DPP is also lea
Taiwan into a new era of govern
efficiency and clean politics. Throu
this process of democratization, th
has upheld the fundamental pri
of peace, not only in domestic pol
reform but also in facing China.

The Democratic Progressive P
is not trying to initiate confront
with China. Nor does the DPP se
draw the U.S. into conflict with C
Mayor Chen and the DPP unders
that the U.S.'s commitment to Tai
security and defense relies on re
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political leaders on both sides.

Bi-khim I

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As I stood outside one morning, I noticed a crane moving a heavy load. Looked like about two tons of steel sheets. All of a sudden, the crane hits the side of another piece of machinery, and I realized it was right over me. It was coming at me fast and I couldn't think of where to go. I jumped, but it really felt like I was being lifted off the ground. Somehow, I actually landed on top of the load without a scratch.

Joseph Di Emidio, Philadelphia, Pennsylvania

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THE BEST BUSINESS BOOKS OF 1998

Time was, business topics were the neglected stepchildren of book publishing. But things have changed: In 1998, a new emphasis on business could be seen both in the number and quality of business narratives, histories, analyses of economic trends, and even fiction centered on U.S. global commerce. From that pile, are our picks for the top 10 business books of 1998.

Consider what became one of the most celebrated—and commercially successful—books of the year, Ron Chernow's *The Life of John D. Rockefeller Sr.* (Random House). The key to its success is both the author's formidable writing style and the fact that few people today know much about Standard Oil's founder. Now gives readers a Rockefeller who is more than the sum of his Standard Oil works, a complex person reflective of both his mother's Methodist charity self-restraint and his father's snake-eating ways.

Fascinating chapters describe Stan-ley's anticompetitive practices, the federal antitrust day of reckoning, Rockefeller philanthropies, and the lives of Rockefeller progeny. But most important, we meet John D. Rockefeller Sr. as devil and angel—a man who first seduced the animosity of millions, then persuaded the public that he was really “a sweet, bumbling old man”—and a very, very rich one.

Equally commendable is Niall Ferguson's *The House of Rothschild: Money's Prophets, 1798-1848* (Viking). This is a story of how another family whose name had become synonymous with wealth rose from obscurity—in this case, from Frankfurt's Jewish ghetto. The Napoleonic wars gave these inventors of the international bond market their big opportunity, as the Rothschilds provided cash to the Duke of Wellington's army, simultaneously making a bundle off of exchange-rate transactions, bond-price speculations, and commissions.

They also profited by financing the industrialization of Europe's conservative monarchies when those wars ended. In 1818, Rothschild capital stood at £500,000; in 1828—about 14 years after the resources of the family's near-

est competitor, Baring Brothers. Ferguson “brings vitality to a series of compelling issues, ranging from the Rothschilds' staunch Judaism to their intrafamily marriages,” found reviewer Joseph Mandel.

Critically successful, too, was Richard Powers' novel, *Gain* (Farrar, Straus and Giroux). It focuses alternately on the histories of the fictional Clare International Corp. and Laura Bodey, a 42-year-old woman whose ovarian cancer may be linked to the company's toxic-waste discharges. The structure draws us bit by bit into their two lives.

As Clare expands from 19th-century soapmaking startup to modern-day conglomerate, weathering the decades' economic ups and downs and regularly adapting to consumer markets, we get a microhistory of U.S. capitalism. Bodey's experiences, too—including painful, ineffective cancer treatments—have a case-study-like verisimilitude. But this is no facile tale of environmental despoliation and its consequences. Instead, Powers shows us how corporations are a key vehicle of societal evolution—and how that change often comes with a startling price tag.

A true-life business tale is the subject of David Greising's *I'd Like the World to Buy a Coke: The Life and Leadership of Roberto Goizueta* (Wiley). BUSINESS WEEK's former Atlanta bureau chief describes the rise and reign of the Cuban-expatriate chemical engineer who, 26 years after going to work for Coca-Cola Co., overcame long odds to claim that company's top job.

During his first months in office, Goizueta drew up the plan that would set the company's course for the next 17 years. He placed his imprint everywhere, demanding a new discipline from his managers and dumping businesses that didn't fit his vision for Coke. Over the decades, he stumbled—with a foray into moviemaking and with the disastrous new recipe for Coca-Cola. But it was in the “Coca-Colonization” of markets from Eastern Europe to Asia that Goizueta made his

BURN RATE

How I Survived the Gold Rush Years on the Internet
by Michael Wolff

COMPETING ON INTERNET TIME

Lessons from Netscape and Its Battle with Microsoft
by Michael A. Cusumano and David B. Yoffie

THE CORROSION OF CHARACTER

The Personal Consequences of Work in the New Capitalism
by Richard Sennett

GAIN

A Novel
by Richard Powers

THE HOUSE OF ROTHSCHILD

Money's Prophets, 1798-1848
by Niall Ferguson

I'D LIKE THE WORLD TO BUY A COKE

The Life and Leadership of Roberto Goizueta
by David Greising

THE PROFIT ZONE

How Strategic Business Design Will Lead You to Tomorrow's Profits
by Adrian J. Slywotzky and David J. Morrison, with Bob Andelman

PROSPERITY

The Coming 20-Year Boom and What It Means to You
by Bob Davis and David Wessel

TITAN

The Life of John D. Rockefeller Sr.
by Ron Chernow

THE WEIGHTLESS WORLD

Strategies for Managing the Digital Economy
by Diane Coyle



mark. By the time of his death in 1997, the company had tripled in size and taken control of half of the globe's soft-drink market.

High market share alone won't protect a company from profitability problems, however. This is the message of *The Profit Zone* (Times Business) by consultants Adrian J. Slywotzky and David J. Morrison, with Bob Andelman. Instead, the authors say, companies must always be on the lookout for profitable new enterprises. Case studies include the efforts of Bill Gates at Microsoft, Jack Welch at General Electric, Michael Eisner at Walt Disney, and Andrew Grove at Intel.

Heard it all before? Maybe not. "Rarely—if ever—have any observers so skillfully dissected these executives' strategies to create lessons that can be taught to anybody," found reviewer John A. Byrne. And each case study includes an analysis of how a company has out-thought and outmaneuvered the competition, regularly reinventing its business.

Many worthy titles in 1998 dealt with cyberspace, Net commerce, and Silicon Valley. Perhaps the most caustic is Michael Wolff's *Burn Rate: How I Survived the Gold Rush Years on the Internet* (Simon & Schuster). Wolff, a journalist who has written for *The New York Times* and other publications, tells how he began Internet startup Wolff New Media in the early 1990s. Soon, his series of Internet guides and Web sites transformed the outfit into an object of lust for venture capitalists—despite the fact that the company had only about \$1 million in annual revenues and losses of around \$3 million.

"They had no experience to get in the way of their enthusiasm," Wolff reflects of those who would buy out his company for a seven-figure sum. Meanwhile, he has to scramble to keep investors satisfied. In the end, Wolff gets kicked off the board and is forced to fall back on print journalism—a fate he regards as akin to waking from a fever dream. Reviewer Amy Cortese said the book "should be required reading for all would-be Net entrepreneurs."

Developments among the Internet-business elite are the focus of *Competing on Internet Time: Lessons from Netscape and Its Battle with Microsoft* (Free Press) by Michael A. Cusumano and David B. Yoffie. This is the book that made news when Microsoft tried unsuccessfully to get the authors' materials to use in its defense against the government's antitrust suit. But rather than revealing Netscape's team to have been blunderers—and hence more at fault than Microsoft for the market-share losses

that recently drove the company into the arms of America Online Inc.—this volume demonstrates that they were exceptionally adept.

Cusumano and Yoffie admire Netscape's leaders for spotting opportunities, shifting strategies deftly, learning quickly from goofs, and building a \$500 million company in four years. In interviews, company engineers and execs are



**It turns out a book
Microsoft hoped
would help its case,
does the opposite**

remarkably candid. The result, said reviewer Steve Hamm, is "a marvelously detailed account of Netscape's rocket-launch rise and mid-flight correction."

How are we to cope with the social consequences of rapid technological and economic change? For Bob Davis and David Wessel, *Wall Street Journal* reporters and authors of *Prosperity: The Coming 20-Year Boom and What It Means to You* (Times Business), globalization, technology, and education will, instead of hurting Americans, help them stay on top of the world.

Comparing the current technological boom to the ascent of electric power at the turn of the century, the authors suggest that it will take more than another

generation for business to realize the productivity gains. They also foresee wealth spurt resulting from freer global trade. But it's when the authors turn to the subject of education that "their analysis is new and insightful," found reviewer Kathleen Madigan. Most important here, they say, are America's community colleges, whose retraining and work-based offerings will enable the middle class to enjoy "broadly shared prosperity."

The darker side of change is the focus of *The Corrosion of Character: Personal Consequences of Work in the New Capitalism* (Norton) by New York University sociologist Richard Sennett. In a reengineered economy, the author says, we have become unmoored—from traditions, our neighbors, and ourselves.

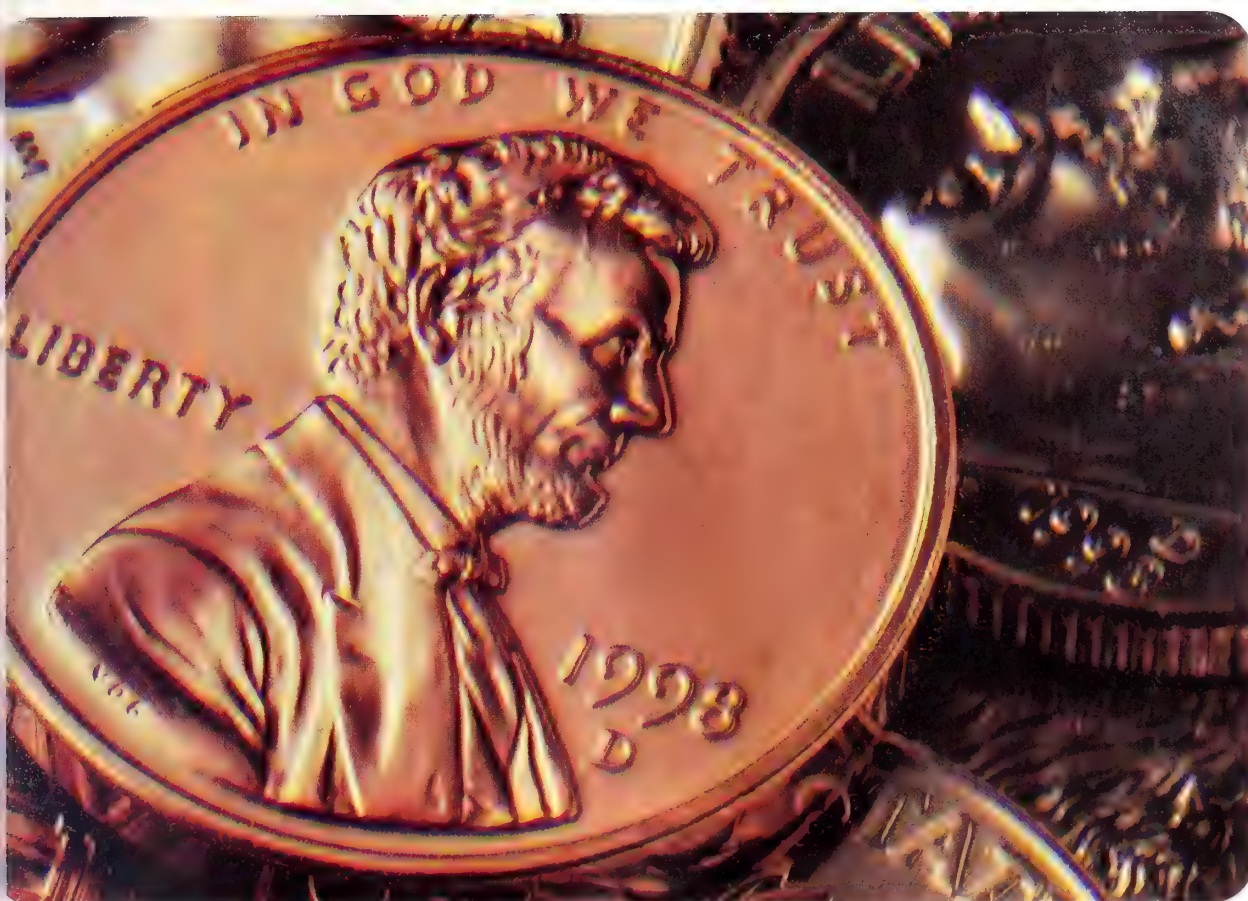
Sennett finds the phrase "no long term" emblematic of what's troubling about today's social relationships, both at work and at home. Whole workforces are viewed as contingent, jobs are replaced by projects, and change runs rampant. The principle of "no long term... corrodes trust, loyalty, and mutual commitment.... Detachment, superficial cooperativeness are better armor for dealing with current reality than behavior based on values of loyalty and service." Such an approach fits into home life, too, he argues. Reviewer Patrick Smith found that "Sennett concentrated into 176 pages a profound affecting argument."

Yet a third take on the New Economy is offered by Diane Coyle in *The Wealthless World: Strategies for Managing the Digital Economy* (MIT Press). Here, economics editor of Britain's *The Independent* offers prescriptions for coping with political and economic decentralization. "The economic decline of nation state" means local governments must help people deal with the increased level of change and risk, she believes. Here, education and training of the workforce should be a priority.

Local economic activity should be nourished: Alternative currencies, for example, should emerge to allow people to trade labor for others' services. Such developments provide a way of jump-starting job creation with less government funds. Reviewer Michael J. Mandel said that the book offered fresh ideas for a time when people are groping to understand the combination of economic change and risk with which we live. But hardly alone in grappling with the issues: Vigor and risk-taking are at the center of all of 1998's top business books.

COMPILED BY HARDY GELBERG

Green is BUSINESS WEEK's lead editor.



CNA covered the company that covered the Denver Mint.

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Pictured above: Portégé Notebook PC with Pentium® II processor. The Intel Inside Logo, and Pentium are registered trademarks of Intel Corporation.



BY STEPHEN H. WILDSTROM

TRAPPING Y2K BUGS—ON YOUR PC

Now there's software to help you seek out and prevent millennial disasters

While corporations and governments scramble to make sure their computers are ready for the millennium, many PC owners are wondering what to do. The good news is that their computers aren't going to drop dead on Jan. 1, 2000. But PC software, especially database and spreadsheet programs used to run small businesses, may hide many date-sensitive problems that could already be causing trouble. (For a good overview of the problem, see www.ibm.com/ibm/year2000/pcs.)

There's nothing like new software to fix the problems created by your old programs, and the industry is meeting the challenge. I tried two Windows products designed to help computer owners deal with Year 2000 issues.

First, a word about the problem: In the PC world, most of the Y2K attention has focused on the fact that some computers' clocks will have difficulty dealing with the new millennium. These products, along with many others, can diagnose such problems and, in the great majority of cases, fix them permanently.

The more serious potential problem involves your applications—and is harder to fix. Your software may interpret dates as being in the 21st

century when you intended them to be in the 20th, or vice versa. Such misinterpretations can cause problems in many business applications, such as assigning a 70-year-old a birth date of 2028.

Norton 2000 from Symantec (877 469-7467 or www.symantec.com) offers a comprehensive treatment. The \$50 program scans the spreadsheets and databases produced by a variety of popular programs and lists the potential problems. Virtually all programs use a formula to assign a century to two-



digit years when data are entered. For example, Microsoft Excel 97 spreadsheet uses the 30th year as a dividing point between determining whether a date should be listed as this century or the next—5/11/28, for example, will be read as May 11, 2028, while 7/14/31 is July 14, 1931.

Unfortunately, different

programs use different rules. Norton 2000 will go through your spreadsheet and database files and point out dates near the century-change dividing line (usually within five years), as well as other potential date errors. Besides Microsoft Access and Excel files, it checks Visual Basic programs for likely problems. Norton 2000 produces annotated copies of spreadsheets with potential errors color-coded by severity. For example, a two-digit date display is judged less severe than a two-digit data-entry field.

The program yields lots of detailed data, but interpreting it and identifying the real problems, and fixing them, can be hard. The manual, unfortunately supplied only in electronic form, explains the sometimes abstruse messages. All told, Norton 2000 is best suited for the relatively sophisticated.

Check 2000 PC Deluxe from Greenwich Mean Time (800-216-5545 or www.gmt-2000.com) is a useful complement to Norton 2000. The \$50 program checks all the programs on your hard disk against a range of known Y2K issues and creates a report. But it's not very good at separating trivial problems, such as the failure of Adobe Photoshop to validate dates, from serious ones. The file scan only reports on generic problems that can exist in files of a certain type.

None of these programs can solve all your Y2K problems. In particular, users of accounting or financial-management software should contact the publisher (or visit the Web site) to check on any date-related issues. The thing to remember is that Y2K is neither trivial nor earth-shattering for PC owners, but a manageable problem that will take some effort on your part to correct.

BULLETIN BOARD

HANDHELDS

HEY, KEYBOARD FANS...

The computer industry's good at coming up with a scratch for every itch. Take 3Com's PalmPilot and Palm III, which are designed to work with



a keyboard. But if you really need to type into your Palm, there's the \$80 GoType! keyboard from Landware (201 279-7944 or www.landware.com). Your Palm fits snugly into a connector on the 14-oz. GoType! keys are smaller than normal keyboard, making touch typing difficult but possible.

...AND PAGER SLAVES

Then there's the matter of sending off the information you've typed into a Palm. Probably the slickest way to turn a Palm III or Windows CE Handheld into a communications device is with BeamLink software from JP Systems and the 4½-oz. Accession II two-way pager from Glenayre Technologies. The system uses the handheld's infrared line-of-sight beam E-mail to and from the pager, which functions as a modem. You can use either Palm or CE software and the pager and \$239 package from JP (www.jpssystem.com). Two-way paging and e-mail service from Skyline starts at \$25 per month, plus a \$20 setup charge.

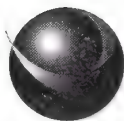


Financial services company

November 12, 1998

\$1,485,000,000

Secondary Offering



EARTHWEB

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November 10, 1998

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Initial Public Offering

swisscom

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October 3, 1998

\$5,600,000,000

Initial Public Offering

In one tough market, three different companies have one thing in common: J.P. Morgan

There were many who said the market had dried up: Closed to large cap issuers. Closed to small cap issuers. Some even said forget about technology companies. And just when everybody seemed to agree that the equity market might be finished for the year, J.P. Morgan went to work.

We jointly ran the books for Swisscom's IPO, reopening the market for large cap global issuers. We ran the books for Earthweb's IPO, reopening the market for small cap technology issuers. And then we ran the books for CIT,

which marked the return to favor of financial issuers and was the largest U.S. secondary offering of 1998.

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BY LAURA D'ANDREA TYSON

WHY THE WAGE GAP JUST KEEPS GETTING BIGGER



SCHOOL TIE:
This economy demands high education levels, which many schools, especially those serving low-income families, are not providing

Despite recent volatility in capital markets, the American economy continues to outperform expectations. Growth remains strong, the unemployment rate hovers around a 24-year low, and inflation is quiescent. If, as seems likely, the "Goldilocks" expansion continues through June of next year, it will go into the record books as the longest of the 20th century. But if the overall performance of the American economy has been decidedly strong, the gains in income enjoyed by the majority of American workers have been decidedly meager.

The real compensation of the median worker was actually about 3% lower in 1997 than it was in 1989, even though growth was solid in 1996 and 1997. The real income of the median family fared somewhat better, regaining its 1989 level by 1997. But this came about because the median family in 1997 worked more hours, equivalent to about six full-time weeks.

Why has the share of the nation's income going to the bottom 60% of American families continued to fall, while the share going to the top 5% has reached a postwar high? Why are Americans continuing to grow apart economically during the current expansion when they grew together during an otherwise comparable expansion in the 1960s?

Although strong profits suggest that a shift in favor of capital income at the expense of labor income may provide the answer, the evidence strongly indicates that this is not the case. The share of corporate profits in national income has increased but remains lower than it was throughout most of the 1960s.

PLAYERS. This expansion, like its 1980s predecessor, has diverged from history in at least one important respect: The higher one goes up the wage distribution, the larger the rise in pay. In fact, the two groups that have won the largest pay increases during this expansion are CEOs and professional basketball players. Only workers above the 75th percentile of the wage-and-salary scale have enjoyed significant real increases in their take-home pay. The result has been growing inequality in the distribution of wages and salaries both between and within occupations, skill levels, age cohorts, and educational categories.

By far the most important determinant of the growing inequality in labor incomes has been the increasing demand for workers with a high level of skills, particularly those with a

college or graduate degree. Such workers, who accounted for only 26% of the workforce in 1997, have experienced the largest increases in compensation. In contrast, workers with a high school education or less, who counted for about 44% of the 1997 workforce, have continued to see the real value of their earnings erode over time.

Changes in the workplace due to the Information Revolution probably explain the growth in earnings inequality among workers in the same educational category. To use modern technologies well requires high levels of initiative, analytical capability, and communication skills, characteristics that are unevenly distributed among individuals with the same formal education.

CONSTRAINT TO GROWTH. The value of a college degree to future income has not been passed upon America's youth. The percentage of high school graduates enrolling in college has climbed from 52% in 1970 to about 66% today. That's good news for both American parents (like me), who worry about their children's future, and for American producers, who rely on a skills shortage as the major constraint on growth, according to a recent study by the Council on Competitiveness. But there's also some disturbing news as well.

Nearly one-third of all beginning college students require remedial courses in one or more subjects. The percentage is even higher at community colleges, in which about 50% of students begin their college careers. Clearly, many K-12 school systems, especially those in poor inner-city and rural districts, are not providing students with adequate skills in reading, writing, and mathematics. This is an important reason why college enrollment and completion rates are considerably lower for poor children. Children from families in the top 60% of the income distribution account for the entire rise in college enrollment during the past 20 years.

If the benefits of economic expansion are to be shared more equitably, then the share of the workforce with a college education must continue to grow. This, in turn, requires that future workers have the training and financing options they need to obtain a college degree regardless of family income. We've made progress on the college-finance problem through Pell Grants and student-loan options, but much more must be done to improve K-12 school systems.

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley and was President Clinton's chief economic adviser.



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through this natural wonder, do what the locals often do. Stop the car and see what the mountain air will inspire in you.

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Local investment. It's the engine for growth in West Virginia – and in communities around the world.

TOYOTA People Drive Us

BY GENE KORETZ

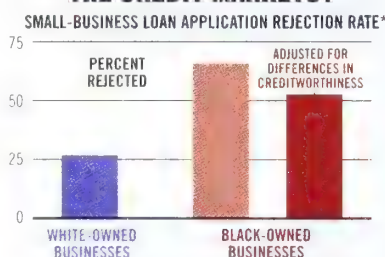
WANTED: BLACK ENTREPRENEURS

Poor access to credit is a big hurdle

Why have so many blacks been left far behind in the struggle to achieve the American Dream of economic success? One possible answer is the low rate of self-employment among African Americans. Experts note that going into business for one's self has long been a major route of economic advancement for disadvantaged groups in the U.S.—from Jewish, Chinese, and Japanese immigrants earlier in the century to many Asian immigrants today.

By comparison, African-American entrepreneurs are few and far between. Census Bureau data indicate that the

DISCRIMINATION IN THE CREDIT MARKETS?



*BASED ON 1993 NATIONAL SURVEY OF SMALL BUSINESS FINANCES
DATA: DAVID G. BLANCHFLOWER, PHILLIP B. LEVINE, DAVID J. ZIMMERMAN

black self-employment rate is a third of the rate for whites. Moreover, economist Robert W. Fairlie of the University of California at Santa Cruz has found that black men are only half as likely to become self-employed as white men, and they are twice as likely to leave such employment if they do take the plunge.

The challenge, say many policymakers, is to turn these trends around and encourage entrepreneurship among blacks. Raising the rate of black self-employment, it has been argued, could potentially provide a way out of poverty for millions of African Americans. Indeed, several state and federal programs are fostering this strategy as a way for blacks and whites to leave welfare rolls.

A new National Bureau of Economic Research study, however, highlights an apparently serious hurdle: significant discrimination against black-owned small businesses in the credit markets.

In the study, economists David G. Blanchflower, Phillip B. Levine, and David J. Zimmerman analyze data from

the 1993 National Survey of Small Business Finances, a canvas of more than 4,600 small businesses. Conducted by the Federal Reserve Board and the Small Business Administration, the survey provided detailed information about the companies', and their owners', financial conditions and other matters.

The researchers' analysis is telling, to say the least. Asked about problems they had faced in the past year, business owners were pretty much alike in grousing about things like regulations, taxes, and workmen's comp costs. The big exception was that blacks were twice as likely as whites to complain about credit availability, and three times as likely to see this as a future problem.

Indeed, the study revealed that blacks were almost three times as likely to have had a loan application denied in recent years (chart)—a result that seemed partly attributable to the fact that black-owned companies were generally less creditworthy than other groups as measured by past instances of bankruptcy, overdue loans, and court judgments. Black concerns were also younger, smaller, and more likely to be located in central cities and owned by someone with less experience than their white counterparts.

After adjusting for all of these factors, however, the researchers still found that black-owned businesses were twice as likely to be denied a loan from a bank or other financial institution as similar white concerns. And they found that black companies pay interest rates that average one percentage point higher. In contrast, the study turned up no significant differences in borrowing via credit cards, whose issuers are often unaware of applicants' race.

In sum, says Blanchflower, "it's hard to avoid the conclusion that blacks face serious discrimination in credit markets—a fact that may say a lot about their lack of economic progress."

TOTING UP THE PEACE DIVIDEND

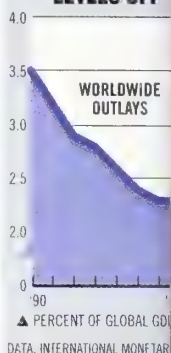
Has military spending hit bottom?

Global military spending has leveled off, after falling sharply from 1990 to 1995. In that period, outlays by the former Soviet Union plummeted and U.S. expenditures shrank from 5.3% to 3.5% of gross domestic product. But in both 1996 and 1997, the International Monetary Fund reports, such spending by all nations stayed level at about 2.3%

of global GDP, compared with 3.5% in 1990.

The IMF estimates that the annual "peace dividend"—the added amount that would have been spent if military outlays as a share of world output had stayed at 1990 levels—came to some \$357 billion last year. It also notes that, on average, amounts equivalent to a third of such savings appear to be devoted to higher social spending.

MILITARY SPENDING LEVELS OFF



RED-FACED OVER SOCIAL SECURITY

A conservative think tank's boom

A report on Social Security issued by the conservative Heritage Foundation earlier this year has been kicked up a storm. The focus of attention, widely covered in the national press, that low-income, single, African-American males born in the 1960s would actually get less in pension benefits than they paid into the system.

The trouble with this projection, others in the report is that they are based on a glaring computational error. As noted recently by Robert J. Myers, former chief actuary of the Social Security Administration, Heritage's misstep was to rely entirely on average life expectancies in calculating rates of return. For example, it assumed that blacks currently aged 21 would live exactly as long as whites—two years after they started collecting benefits.

In reality, says Myers, about 40% of this group could be expected to die before reaching retirement age, so they would pay less in Social Security than Heritage assumes. And because 60% will live longer than 67 (average perhaps 12 years), their benefits would be a lot higher.

Add the fact that the benefit formula favors low-income workers, and it's clear that this group of young blacks should come out ahead, says Myers. In other research indicates that the white population actually enjoys the same—or better—expected returns from Social Security as whites.

A woman with short dark hair, wearing a dark suit with a white collar, is sitting on a large stack of StorageTek tape drives. She is looking towards the camera with a slight smile. The background is a warm, yellowish-gold color with some geometric patterns on the left side.

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INSURANCE SERVICES PROVIDER GAB ROBINS INVESTS
TO FEED INFORMATION-HUNGRY CUSTOMERS

For insurers and corporate risk managers with claims to process, nothing matters more than information. It has to be quick, accurate, and intelligent. Janet Turoff, senior vice-president and CIO at GAB Robins, talks about how this insurance services provider invested \$40 million to create the most sophisticated reporting systems in the industry for its clients.

Q: How are the needs of your customers changing today?

A: There is a phenomenal rush toward more timely, integrated information. Customers don't want isolated reports. What corporate risk managers and insurers want is an integrated view of information which covers the first report of the injury or loss all the way through the adjustment of the claim to the MIS-generated analysis and reports.

Q: How has GAB Robins evolved to meet those needs?

A: Historically, our mainframe systems made it difficult to react quickly and flexibly to customer needs. Over the past few years GAB Robins has invested over \$40 million to completely overhaul our technology infrastructure. We made this substantial financial commitment because we realized that we are not just in the insurance services business, we are in the information business as well. That understanding is what differentiates us from our competition.

Q: How does that concept translate into customer services?

A: Today we can tailor our customer's unique information gathering requirements quickly and seamlessly through our client/server-based ACIS™ (Automated Claims Information System) core claims processing system. We can provide information-based reporting back to our customer in whatever format they prefer—paper, disk, tape, or through an online facility.

We have customers with tens of thousands of claims. They can access their claims information with us through our claims management products ClientTell™ (available today to our Risk Management customers) or the soon to be released ClaimConnect™ product (for our Insurance Company customers). Customers can download their claims information whenever it is convenient for them—real time or scheduled during off hours. Customers can use the built-in reporting

facilities of these tools or their own reporting tools.

We also have customer based advisory councils and focus groups who provide a constant feedback loop on our tools and services so that we know we are focused on building our information-based tools to meet their needs.

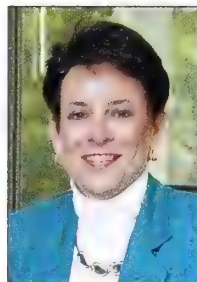
Q: Impressive! What kind of technology do you have in place that enables you to provide information so flexibly?

A: We have two very strong vendor relationships—with Hewlett Packard and Oracle. We partnered with technical lab staff and the Cupertino, California-based senior management teams of both HP and Oracle to help us build a scalable system that would

perform as we need it. As a result, we were the first in the country with the implementation of the Oracle Parallel Server (OPS) technology in a high volume production environment. OPS is a new technology option that allows multiple computers to access the same database with improved performance and reliability. This technology provided

with the boost we needed to accommodate our growing online population.

Today we can handle 850 concurrent users on our systems and we can easily grow to 1,500 concurrent users with the same performance. This move to client/server also allowed us to maximize our infrastructure into the latest LAN, WAN, and desktop environments. It provides us with the ability to quickly adapt to changing business needs and introduce new products.



Janet Turoff, senior vice-president and CIO, GAB Robins North America, Inc.



At a catastrophe site, a GAB Robins claims adjuster uses an "untethered" laptop to enter claims information. The adjuster can enter data and generate reports with the remote computer, and upload the information later. This unique system should dramatically speed up claims processing for natural disasters, when telephone lines may not be readily available.

Q: Were there other benefits from this substantial technology investment?

A: Absolutely! This platform will allow us to be completely Year 2000 compliant with our core claims processing systems.

Clara Van Hast, a New York-based writer reports frequently on insurance and management.

WHEN THE NEW MILLENNIUM STRIKES:

FIGHT OFF ALIENS
TRYING TO RECLAIM PLANET.

CELEBRATE YOUR TPA'S
YEAR 2000 COMPLIANCE.



At GAB Robins, we've anticipated the technology adjustments necessary to face the new millennium without fear. Our Client Server-based systems are already year 2000-compliant, so no matter what claims tomorrow may bring, we'll be ready to respond. And without the Y2K monster to deal with, we can concentrate on planning for more important things...like the future. Questions? answers@gabrobins.com or call **888.888.4242**

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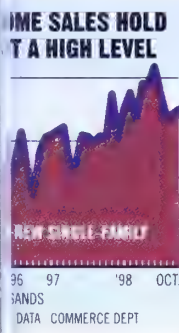
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JAMES C. COOPER & KATHLEEN MADIGAN

HAPPY CHRISTMAS AND AN IFFY NEW YEAR

Shoppers are gift-wrapping the economy, but 1999 will be less cheery

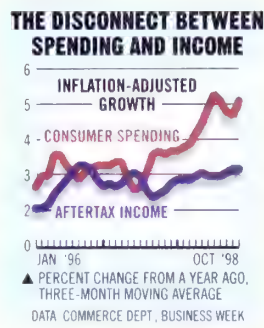
U.S. ECONOMY With post-Thanksgiving reports showing that consumers put in force searching for everything from the elusive Furby to the perfect cashmere sweater, the outlook for yearend household spending looks far brighter than a few months ago. Back then, the drop in the market and uncertainty about global finances hit consumer confidence hard and led many analysts to expect a dreary holiday shopping season. Not so, it looks now. In a matter of weeks, aggressive interest-rate cuts by the Federal Reserve have breathed new life into stock prices and stabilized global markets, helping to clear out the air of doom and gloom that weighed on households' psyches. That, plus continued healthy gains in purchasing power, means that consumer spending is on track to grow by at least 4% in the fourth quarter, perhaps yielding the best yearend shopping season in six years. All holiday spending, plus a strong housing market (see below), could push the quarter's gain in real gross domestic product into 3% territory.



THIS MEANS that the cheer of 1998 may not carry over very far into 1999. The latest news from the Boeing Co. shows why: The aircraft maker announced on Oct. 1 that because of weak Asian demand, 20,000 workers will be laid off by 2000, on top of 28,000 already slated to be let go. Its stock price then plunged, and other companies likely to follow Boeing's lead, a downturn in the job markets will ultimately be the result. That reins in the powerful consumer sector. For now, though, consumer spending remains robust.

In addition to more confidence in the economy, households are tapping sources of new cash in order to purchase more goods and services, including big-ticket items such as cars, homes, and home furnishings. Certainly, fatter paychecks are providing a lift. After-tax real earnings rose 3.3% in the 12 months ended in October, the fastest pace in 1½ years. Many households are enjoying the swiftest advance in purchasing power in two decades, thanks to rising wages and low inflation. The recent drop in oil prices to about \$11 a barrel simply strengthens that equation, freeing up even more income for holiday shopping.

But rising incomes don't explain all of the ongoing spending surge, since consumer purchases have soared by 5.4% over the past year, far outpacing income growth (chart). In addition to their salaries, households obviously are relying on gains from the stock market, as well as some timely extra cash provided by this fall's record wave of mortgage refinancings. The Dow Jones industrial average has come back from its September low, although there still appears to be some earnings angst among investors, as shown by the Dow's drop in early December.



FOR RETAILERS, however, these monetary windfalls have not changed a crucial part of consumer psychology in the 1990s. Shoppers are still very price-conscious. Most retailers will probably have to mark down many items in order to attract shoppers. And the discounting will mean that the booming holiday demand will not make it all the way down to the bottom lines of many retailers.

Consumers aren't just buying gifts, however. Home sales also remain very strong, even after a record-breaking pace in the spring. Sales of existing homes rose 2.1% in October, to an annual rate of 4.8 million, and new homes sold at a 851,000 annual pace, 0.8% above their September level. Residential construction, up 0.8% in October, led the month's 0.3% rise in overall construction spending.

The available data for November look equally solid. Mortgage applications to buy a home have slipped only a bit from their lofty levels of September and Oc-

Business Outlook

tober. And homebuilders say their sales rose in November, setting a record. All in all, builders are extremely optimistic about both current business activity and their prospects in coming months.

MANUFACTURERS, however, are singing a more melancholy tune, as much of consumer demand is going to imports and as exports continue to sag. The November purchasing managers' index fell again and remained below the 50% mark, signifying that industrial activity is contracting. The index slipped from 48.3% in October to 46.8%, the lowest reading in nearly three years. Production took a big fall (chart), and the indexes covering orders, employment, inventories, and the order backlog all declined.

New data from the Fed, however, indicate that manufacturing's slump is not as steep as previously thought. Revisions to the Fed's measure of industrial production show that nonauto output rose slightly in the third quarter instead of falling. And the new data say that October output was about even with the third-quarter average, instead of below it. While factory production has slowed sharply this year, it has grown at an annual rate of 1.8% since the end of 1997, instead of only 0.3%, as the original data showed.

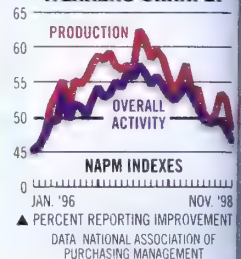
Sagging foreign demand is obviously the main drag on manufacturing. Price-adjusted exports in the third quarter were 2.1% below their year-ago level. That's the

first year-over-year drop in 15 years. And the purchasers' export-order index in November remained near October's record low. Both readings were far below the 50% that indicates that orders are rising.

Until foreign markets get back on their feet, the U.S. economy will harbor a split personality. Overall domestic demand will remain positive, but manufacturing output and employment will suffer. That means that the holiday season will not be very cheerful for the 200,000 or so factory workers who have been pink-slipped so far this year. Moreover, a worsening foreign trade gap will continue to subtract a bit from overall GDP growth.

Consumers, however, seem ready to offset the weakness in the foreign sector. That is the case this holiday season when consumer fundamentals look as strong as they ever have in this expansion. To be sure, the roots of the slowdown are beginning to take hold. The profits recession, and its implications for corporate restructuring, will not go away anytime soon. But most consumers do not want to consider the prospect of a 1999 slowdown right now—not when there are gifts to wrap, trees to decorate, and Furbys to find.

PURCHASERS SAY OUTPUT WEAKENS SHARPLY



CHILE

DECLINE OF A LATIN FORTRESS?

Life in Latin America's safe haven is getting more precarious. Chile is slipping into recession as high interest rates, low commodity prices, and the fallout from the Asian crisis hit one of the region's fastest-growing economies.

In the third quarter, Chile's real gross domestic product grew by 2.7% from a year earlier. That's down sharply from 5.8% in the second quarter, and the lowest yearly growth rate since 1990 (chart). Exports ac-

counted for almost all of the increase. Domestic demand edged up just 0.5% from a year ago.

Moreover, the data for this quarter look even poorer. Retail sales fell 6% in October from a

year ago as the high cost of credit cut into demand for furniture and other durable goods. The unemployment rate rose from 6.8% in September to 6.9% in October, a two-year high. And October's industrial output was

down 6.8% from a year ago. Chile's GDP is probably shrinking in the fourth quarter. That suggests the economy will fall short of the government's target of 4% growth in 1998. Private forecasts put 1999 growth at less

than 2%. Chile grew by more than 7% in both 1996 and 1997.

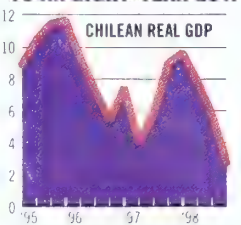
In response, the central bank has begun to cut interest rates after it hiked them earlier in 1998 to defend the peso. On Nov. 24,

the bank lowered its overnight lending rate from 10% to 8.5% above the inflation rate, which was 4.3% in October. It was the third large cut in seven weeks.

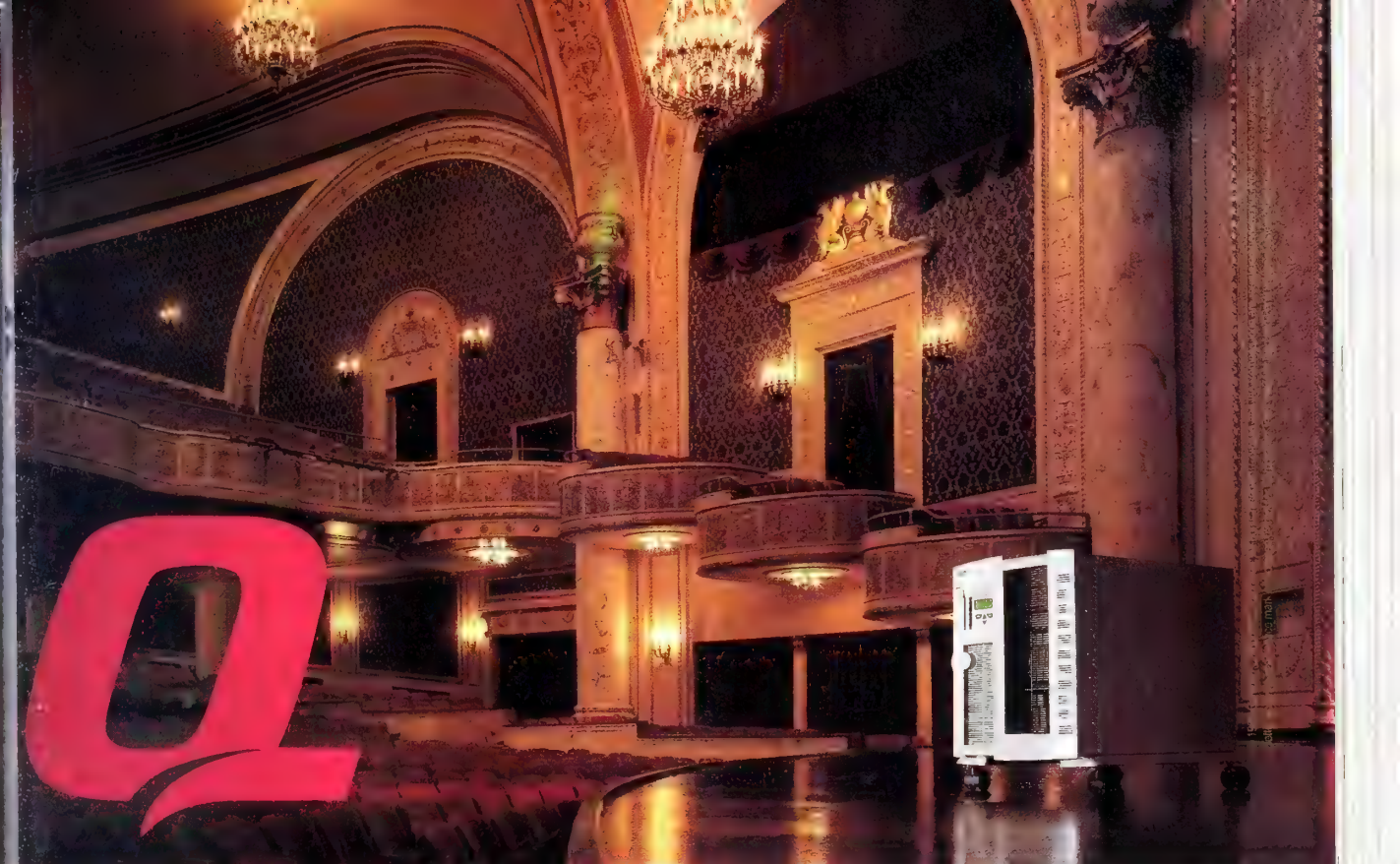
Even so, Chile still faces problems. The jobless rate is expected to go even higher in coming months, which will hold back consumer spending. And businesses are cutting their capital budgets as falling stock prices and still-high interest rates make it difficult to finance capital investment.

One bit of good news from the slowdown is that softer domestic demand is slowing imports and improving the current account deficit. Real imports last quarter were flat from their year-ago levels. And the current account gap, which will likely exceed 7% of GDP for all of 1998, may shrink to about 6% to 6.5% of 1999's GDP.

GROWTH SLIPS TO AN EIGHT-YEAR LOW



▲ PERCENT CHANGE FROM A YEAR AGO
DATA: STANDARD & POOR'S DRI, BUSINESS WEEK



Q

Is it possible to
give the
performance
of a lifetime
every single day?

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Exxon Chairman Lee R. Raymond says he longs for the days of \$20-a-barrel oil. So does every other oil executive. But what makes Raymond and his company different is how well they tolerate today's \$11-a-barrel price. The lowest inflation-adjusted oil prices of the past half-century have other oil companies running for cover, and once-standoffish oil-producing nations are suddenly desperate for strong partners. Yet, Exxon Corp.—perhaps the most efficient of the majors—is ideally placed to cash in.

And on Dec. 1, it made its first move, announcing the biggest takeover in corporate history: a \$75 billion stock deal to purchase Mobil Corp. and forge the world's largest oil company. As the chief executive of \$181 billion Exxon Mobil Corp.—a behemoth fully a third larger than No. 2 Royal Dutch/Shell Group—Raymond will be able to seize global opportunities that are unavailable to weaker competitors.

STRUGGLING OPEC. What opportunities? Exxon Mobil—and other companies that can compete with its efficiencies and technical skills—will be the leaders in a new era for the energy business. The old order, dominated by the notion of scarce oil and by the political machinations of OPEC, is crumbling. No longer capable of keeping prices high by deliberately withholding supplies, OPEC members are now struggling to survive on a diet of cheap oil.

By contrast, producers such as Exxon are thriving—in part because of OPEC's tactics. Denied access to the most easily recovered oil reserves, Exxon, Mobil, and others have honed their skills in harvesting hard-to-reach oil and gas at improbably low costs from remote Asian steppes, deep waters off the coast of Africa, and far above the Arctic Circle. These discoveries—as well as weak demand in Asia—have helped produce an oil glut that is wolfsbane for the cartel: The bigger the glut, it seems, the less able OPEC is to reach agreement on production limits. Following a recent unproductive meeting in late November, the price of West Texas Intermediate, the benchmark U.S. grade, hit \$11.13 per barrel on Dec. 1.

The first big opportunity that Exxon Mobil may try to explore is a partnership with Saudi Arabia. It has a quarter of the world's oil reserves, and the cheapest to tap. But the Saudis have

TREMORS FROM CHEAP OIL

Plunging prices spur the world's biggest merger and reshape petro politics

seen revenues plunge because of declining prices that they have been reduced to borrowing money from tiny Abu Dhabi.

Now, the kingdom is ready to deal. On Sept. 25—two decades after Saudi Arabia nationalized its oil industry—Crown Prince Abdullah ibn Abdul-Aziz held a one-hour “tea party” with top executives of seven major U.S. oil companies to discuss possible cooperation. Other Mideast producers are also considering such partnerships. And who is

better positioned than the company will be the biggest by far? Says F&I stock & Co. analyst Fadel Gheit: “You’re talking about a company that can reshape the economic landscape of a country.”

Not everyone can capitalize on the impending shift in power in the world of oil. The global meltdown of many emerging markets earlier this year was accelerated by deflation in the commodities markets, and in particular oil. Major losers then—Russia and other ex-Soviet states, Indone-

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THE WORLD'S TOP 10 OIL COMPANIES*

1 EXXON MOBIL \$181 billion

EXXON

REVENUE \$123 billion

NET INCOME
\$8.5 billion

EMPLOYEES 80,000

STRENGTHS A strong balance sheet, low exploration and production costs, and excellent return on capital

Mobil

REVENUE \$58 billion

NET INCOME
\$3.3 billion

EMPLOYEES 43,000

STRENGTHS Better positioned than Exxon in oil and natural gas reserves outside North America

COMPANY 1997 REVENUE IN BILLIONS

| | |
|----------------------------|--|
| 2 ROYAL DUTCH/SHELL | Rich in cash and reserves, but under pressure because of high costs and lackluster earnings. |
| \$129 | |
| 3 BRITISH PETROLEUM | Kicked off merger wave with August agreement to buy Amoco for \$64 billion. |
| \$104 ** | |
| 4 TOTAL FINA | Total agreed on Dec. 1 to buy Belgium's PetroFina for \$13 billion. |
| \$55 | |
| 5 ENI | Italian government owns 37% |
| \$53 | |
| 6 TEXACO | Recently cancelled joint marketing deal with Shell in Europe. Merger with Chevron rumored. |
| \$45 | |
| 7 ELF AQUITAINE | Tried to buy PetroFina but lost to Total. |
| \$45 | |
| 8 CHEVRON | Merged with Gulf in 1985, but most think it is a takeover candidate. |
| \$35 | |
| 9 REPSOL | Oil, gas, and chemical company sold off by Spanish government. |
| \$22 | |
| 10 CONOCO | After spinoff from DuPont, it's on list of takeover candidates. |
| \$21 | |

*Assuming current deals are completed. Excludes state-owned companies

** After pending purchase of Amoco Corp. DATA: BLOOMBERG FINANCIAL MARKETS, PLATT'S, BUSINESS WEEK

cash flow to make the investments that they need," says Rafael Quijano, managing partner of Latin American Petroleum Intelligence Services in Washington.

HIGH TECH. Low oil prices are excellent news, of course, for big energy consumers. A sustained \$10-per-barrel drop in the price of oil cuts about 0.7 points from the annual U.S. inflation rate over five years and adds about 0.3 points to the U.S. economy's growth, according to an analysis for BUSINESS WEEK last year by Standard & Poor's DRI. That, in fact, is about what has happened over the past year.

However the geopolitics play out, and wherever prices go, it clearly pays for producers to have the best technology and lowest costs. Notes Robert P. Peebler, CEO of seismic software developer Landmark Graphics Corp.: "If you're the most productive company, you can take advantage of the low prices, because you're going to have the cash flows to acquire properties. And when you have high prices, you can be more profitable."

On the other hand, if you're still operating under the assumption that the earth's petroleum—or at least the cheap stuff—is about to run out, you're not going to thrive in the new oil era. Technology is making it possible to find, produce, and refine oil so efficiently that its supply, at least for practical purposes, is basically unlimited. So oil executives need to be as obsessive about cutting costs as anyone else. "You cannot count on the market to bail you out of bad decisions," Raymond said in

a Dec. 2 interview.

Hence the merger wave. Says Leo P. Drollas, deputy director of the Center for Global Energy Studies in London: "The industry is looking ahead and seeing low oil prices as far as they can see. The mergers are a defensive action." Internal cost-cutting is no longer enough, Mobil Chairman and CEO Lucio A. Noto said at a Dec. 1 news conference: "The easy things are behind us. The easy finds. The easy cost savings. They're done... We tend to do the smart thing

asia, and to a lesser extent Mexico will suffer even more under the order. Even if consumption rises dramatically over time, most analysts expect prices to remain in check because of advanced technology and because OPEC nations need to sell as much oil as they can to maintain their incomes. Russia could be among the biggest losers. According to Moscow's Centinvest brokerage, it costs \$6 to \$8 a barrel on average to produce and pipe an oil, several times Mideast costs.

Together, oil and gas account for almost half of Russia's export earnings. And with its government is close to default on \$150 billion in hard-currency debt, the continuing drop in prices is the last thing Russia needs.

Other producing nations that count heavily on oil revenue are having to make adjustments as well. Mexico, for instance, has reserves that are relatively cheap to recover, but its state-owned oil company, Pemex, is under pressure. "Pemex isn't generating the

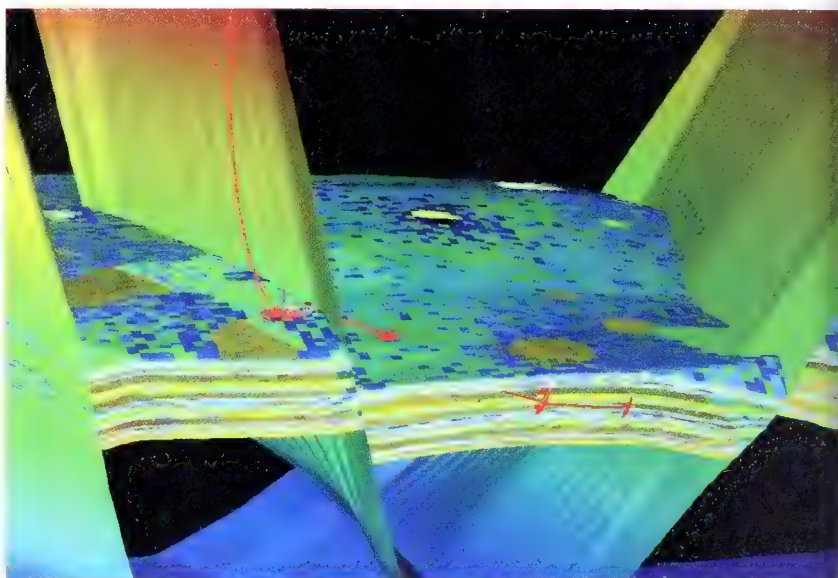
when times are tough. And times are tough now."

By joining forces, Exxon and Mobil aim to cut \$2.8 billion a year in costs—much of it by eliminating 9,000 jobs, or around 7% of their combined worldwide total of 123,000. Though they'll keep both brand names, they will merge the marketing organizations that support them. "It is good management applied to a bigger asset base," says Rod Peacock, managing director for global energy investment banking at J.P. Morgan Securities Ltd. in London, who advised Exxon on the deal.

The merger of Exxon and Mobil will not only create the world's largest oil company, but it also will create one of the world's largest companies of any kind. The combined revenue of Exxon and Mobil for the first nine months of 1998 was \$119 billion, vs. \$115 billion for No. 1 General Motors Corp. Low oil prices plus divestitures

CUTTING EDGE

Using their technological lead in finding oil, Western companies such as Exxon have been able to undermine OPEC's power



may knock Exxon Mobil down to second place. (Note to numbers watchers: Some sources report higher revenue numbers for Exxon and Mobil, mainly because they include fuel excise taxes that are passed straight to governments.)

Does size matter? Yes. The biggest companies—Exxon, Royal Dutch/Shell,

and British Petroleum—routinely hit a higher return on capital than the smaller kin, says Douglas T. Terresio. Morgan Stanley Dean Witter analysts say Big companies can defray fixed costs over a wider revenue base. And they can tackle the biggest international projects—without partners, if need be. T

WHY TRUSTBUSTERS ARE BUSY EVEN WHEN PRICES FALL

Prices for gasoline and heating oil are near inflation-adjusted 50-year lows. And excess supply continues to flow from all corners of the globe. Yet, there is no doubt—certainly not in the stock market at any rate—that federal trustbusters will take an extra hard look at the proposed combination of Exxon Corp. and Mobil Corp.

The megamerger points up what is becoming a more frequent question for regulators: How do you measure anticompetitive activity and prevent harm to consumers in markets where prices are falling? For the past several years, the Justice Dept. and Federal Trade Commission have struggled with this conundrum. No longer fixating on how companies use market power to raise prices—once the litmus test of antitrust litigation—the agencies now must ask another type of "what if?" Would prices be even lower if this merger didn't happen?

Over the past two years, the government has asked that question and concluded that some proposed mergers

would impede market forces pushing down prices. The FTC stopped a pair of huge deals in the drug-wholesale business: McKesson Corp.'s plan to acquire AmeriSource Health Corp., and Cardinal Health Inc.'s proposed purchase of Bergen Brunswig Corp. In the office-supply superstore business, it concluded that combining Staples Inc. and Office Depot Inc. would inhibit the fall in prices—even though the companies ar-

NEW TEST With deflation, the government now asks if prices would be even lower if one player didn't control such a large share

gued that their greater efficiency would, in fact, accelerate that decline. **THE WINDOWS TEST.** The question of how quickly prices drop with or without competition is also at the heart of the Justice suit against Microsoft Corp. In its economic analysis of the software industry, Justice has repeatedly argued

that Microsoft's prices would be lower if it had more direct competition. On Dec. 1, Frederick R. Warren, the government's expert witness, testified that the price for Microsoft Windows is "significantly above what it would have been if Microsoft didn't have 90% of the market." Warren-Boulton, head of a Washington economic consulting firm, argues that while prices of other parts of the PC are falling, the Windows price is an ever larger percent of the total PC cost. "We've seen a really dramatic increase in the cost of the operating system relative to the other components in a PC," he said.

How to use the tool is still being applied to William Gates III, the Rockefeller of the computer era, to Exxon and Mobil—the two largest chunks of the feller's Standard Oil trust? The one segment of the oil industry that Exxon Mobil will control to the extent that Microsoft controls the software industry. Nor will this giant have near the market power of the

BRINGING TOGETHER LEADERS IN TECHNOLOGY

STREAM

and Mobil are in recovering oil from extremely deep and the Arctic. Technology: platforms.

leads in liquefying natural gas for transportation. Exxon is converting natural gas into liquids and chemicals.

DOWNSTREAM

■ Exxon is a leader in metallocene catalysts, which recover far more usable petroleum products from a barrel of oil than older catalysts.

■ Mobil introduced the first fully synthetic engine oil in 1970 and now has more than 50 synthetic oils for cars, planes, and factories.

DATA: EXXON CORP., MOBIL CORP., BUSINESS WEEK

afford not only to explore and sink but to build refineries, petrochemicals, pipelines—the whole assembly that host countries desire. Indeed, they may have seen the wisdom of a merger after losing a bid to develop natural gas fields in Turkmenistan because it didn't match Shell's offer to build a

pipeline for \$1 billion.

Until this year, there had not been a major oil merger since the 1984 combination of Chevron Corp. and Gulf Corp. Then in August, British Petroleum announced a \$64 billion deal to buy Amoco Corp. And now Exxon is buying Mobil. Says Terreson: "BP-Amoco was a shock to the system, and Exxon Mobil was a seismic shift. There are going to be several more to follow."

That's a good bet. On the same day as the Exxon Mobil deal, France's Total agreed to buy Belgium's PetroFina

for \$13 billion. Texaco Inc. and Chevron, worried about being left behind, might make natural partners. In a speech to analysts on Dec. 2, Texaco CEO Peter Bijur said: "We will not rush into anything. We don't feel the urge to merge."

Conoco Inc., recently spun off from DuPont Co. in the biggest initial public

offering ever, could disappear into some other company's embrace soon—this time, probably another oil company. Asked at a news conference how much farther the consolidation might go, Total CEO Thierry Desmarest answered: "The game will go on until the antitrust authorities call it off."

The Exxon-Mobil deal certainly rings antitrust bells. It unites the two biggest companies of the Standard Oil Trust, which was broken up by the courts in 1911. But most experts expect the deal to go through—perhaps after the companies divest refineries and gas stations in markets where they have large market shares. In Washington, D.C., for instance, together they sell 35% of all gasoline, says *National Petroleum News*.

Low prices are shaking the world oil industry from top to bottom. The pain is widespread. And old titans may disappear. But as Exxon's deal for Mobil shows, for some players, crisis equals opportunity.

By Peter Coy in New York, with Stanley Reed and Heidi Dawley in London, Carol Matlack in Moscow, Elisabeth Malkin in Mexico City, and bureau reports

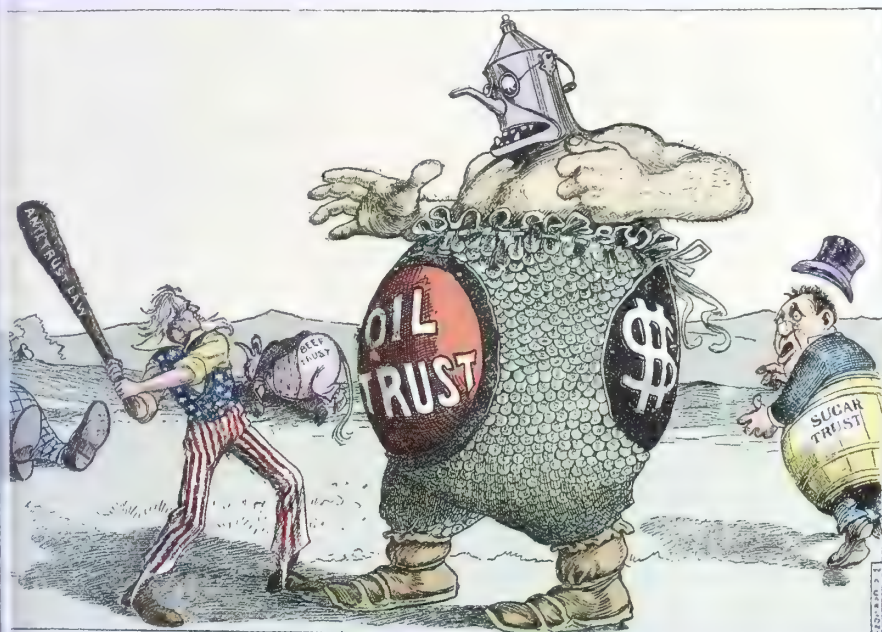


ILLUSTRATION: "A 1907 editorial cartoon champions Uncle Sam's fight against Big Oil"

government broke up in 1911. The government will review carefully ways in which the Exxon-Mobil deal might reduce competition. For example, that it is a divestiture of some "downstream" operations—refining and retail

sales of gasoline—where the two now compete directly. "In regions where the two firms have high shares in the retail gas market, that could require some divestitures," says Stephen Calkins, professor at Wayne State University Law School. But in exploration and develop-

ment, where competition is brisk, Justice may not demand anything, despite the combined companies' awesome assets.

One core concern in the Exxon-Mobil union will be whether proposed cost-cutting will keep prices on a downward trend. Even if the agency concludes that crude oil prices are beyond the control of the companies, the FTC will have to decide which would do more to transmit deflationary pressures down to the pump—super-efficient giants or intense competition among more players. This will be a key concern as the Feds review other oil-patch marriages. In the wake of the Exxon-Mobil deal, other combinations are likely. The FTC is already reviewing British Petroleum Co.'s purchase of Amoco Corp.—which is expected to go forward, but with strings.

Those are tricky tasks. But as global competition induces more companies to merge and as deflation takes over more markets, trustbusters will constantly face the pricing question: How low is low enough?

By Susan B. Garland in Washington



INFORMATION STRATEGIES

Y2K IS WORSE THAN ANYONE THOUGHT

The final reckoning for the bug could hit \$1 trillion

People have been sounding the alarm about the costs of the millennium bug—the software glitch that could paralyze computers come Jan. 1, 2000—for a couple of years. Now, the hard numbers are coming in and, if the pattern holds, they point to an even larger bill than many feared just a few months ago.

In the third quarter, the Securities & Exchange Commission for the first time urged companies to disclose what it will cost them to head off the bug. The disturbing news: Many now plan to spend, on average, about 26% more than they thought just months ago. AT&T, for example, had said in early 1997 that it might shell out \$300 million. Now, it says it could spend \$900 million before Jan. 1, 2000—some \$186 million of that in this year's fourth quarter alone. Chase Manhattan Corp. says it will spend \$363 million, up 21% from its \$300

million second-quarter estimate. And Aetna Inc. is blaming fatter-than-expected Y2K bills—\$195 million instead of the \$139 million forecasted last summer—for a 6.1% drop in third-quarter profits. Even states are feeling sticker shock: Illinois officials say fixing bugs in the state bureaucracy will cost \$114.4 million—up 65% from 1997 estimates.

Outspoken Y2K-watcher Edward E. Yardeni, chief economist at Deutsche Bank Securities Inc., says the numbers show that some organizations are “just starting” to wake up to Y2K’s potential for damage—but he believes the possi-

The Fed expects GDP to shrink 0.3% in 2000 because of millennium-related problems

ble impact is enormous. In fact, Yardeni puts the chances of a recession in 2000 or 2001 at 70% because of “a glitch in the flow of information.”

Now, companies are testing repairs and finding that some don't work properly. And with less than 300 days to go, some are saying they can't make all their fixes on time and will have to find new ways to do business, regardless. That could mean, for example, investing more in backup supplies, as Xerox Corp. is doing, or temporarily shelving just-in-time inventory systems.

The sad reality of Samsonite Corp. illustrates how costs are mushrooming. After spending \$10 million to upgrade its computer system to head off

BASEMAN

the bug, President Tom Sandler proudly assembled some of the troops to unplug the programmers' Y2K handiwork during a dry-run at a distribution warehouse in suburban Denver. “We had 20 outside consultants working with us, all telling me everything was going to work fine,” recalls Sandler. “But then I walked down to the loading dock to flip on the switch.” Nothing happened.

LOST LUGGAGE. Besides driving up Samsonite's Y2K budget, the glitch messed up the company's entire distribution system, freezing deliveries the first 20 days of July and halting operations for months afterward. As a result, many stores were unable to shipments of suitcases, duffel bags, computer cases for the busy back-to-school season. Some systems were sending out incorrect information—including sending trucks to the wrong stores or forklifts to the wrong locations in the plant. “It was frightening,” says Sandler. The tally: In the second and third quarters, the Y2K snafu ate up roughly \$4 million in profits and scuttled \$10 million in sales, he says.

Multiply such problems across the globe and you're talking billions of dollars in lost money. Gartner Group Inc., a technology consulting firm in Stamford, Conn., warns that total Y2K costs could

trillion worldwide—\$600 billion before 2000 and \$400 billion after. Says David Wyss, economist at Standard & Poor's DRI. "It's like that cock film *The Birds*: the time you look, the time—the cost—just seems to get bigger."

Y SCARED. For now, the problem is giving the economy a little lift. The Federal Reserve Bank of Philadelphia predicts that Y2K spending could boost 1999's gross domestic product by 0.1%, or more. But in 2000, it says, GDP could shrink 0.3% because of Y2K problems. Fed Governor Edward W. Kelley says the central bank's Y2K-watcher: "The odds are that with all this spending in 2000, there is no corresponding increase in firms' output, and this lowers

THE TAB IS RISING

What companies say they'll spend to avoid Y2K bugs

DATA: SECURITIES & EXCHANGE COMMISSION. COMPANY REPORTS

| COMPANY | PREVIOUS ESTIMATE
IN MILLIONS | NEW ESTIMATE |
|-----------------|----------------------------------|--------------|
| AETNA | \$139 | \$195 |
| AT&T | 300 | 900 |
| BANKERS TRUST | 180-230 | 220-260 |
| CENDANT | 25 | 53 |
| CHASE MANHATTAN | 300 | 363 |
| GENERAL MOTORS | 400-500 | 890* |
| MCDONALD'S | 8 | 30 |
| MERRILL LYNCH | 375 | 560 |
| SEARS | 63 | 143 |
| XEROX | 116 | 135 |

*Includes \$300 million payment to EDS

company productivity, boosts costs, and reduces its profits." Robert Stansky, manager of Fidelity Investments' \$73 billion Magellan Fund, fears that a costly, last-minute scramble to fix the bug next year will exacerbate weakness in corporate profits. "I'm truly scared

about the Year 2000," he says.

Why is the bug becoming so costly? As the SEC filings show, some companies initially underestimated the size of the repair job. In some cases, it's because business partners aren't up to speed. General Motors Corp., with its 40,000 critical suppliers, worries about glitches beyond its control. "If you don't get suppliers in line, it can be just as bad as not having your internal systems ready," says a spokesman.

At NCR Corp., which makes automated teller machines, executives worry about "the unreadiness" of foreign customers. "The big unknown is how many of our customers, especially in Europe and Asia, are going to delay making Y2K fixes until the very last moment," says Howard Mitchell, NCR's vice-

ATTENTION, SHOPPERS: THE WORLD IS ABOUT TO CLOSE

Computer services and software companies aren't the only ones enjoying a Year 2000 boom. Across the economy, nervous consumers—some motivated by fears of apocalypse—are stocking up on generators, canning supplies, and even army surplus items.

Jan B., a Dallas-area housewife who doesn't want to give her last name, has organized 50 families to purchase 80,000 pounds of wheat, corn, soybeans, and rice. She and her friends believe millennium-related problems will herald social chaos. "This kind of trauma is inevitable," says Jan. "We will begin to trickle into an era of disruption."

GETTING FED. People like Jan are beating a path to Boyce Feed & Grain in Waxahatchie, Tex. The company has been fielding several calls a week from folks looking to buy thousands of pounds of grain. Owner Dennis Horak says Boyce turns away many such calls, but he agreed to sell to Jan B. The callers "are kind of freaking out," he says. "They think the world's gonna shut down in the year 2000."

It's not just individuals worried about millennium

chaos. The Federal Reserve plans to order \$50 billion in extra money for the turn of the century. Alliant Energy Corp., an electric utility, is encouraging corporate customers to buy generators. The U.S. Treasury plans to buy a few generators to prevent disruption in Social Security, tax-refund, and veterans' checks.

Meanwhile, some companies are courting the Y2K hoarders. Idaho-based Walton Feed Inc. markets via

an informal Y2K media network, including radio talk shows and Web sites. The Christian Broadcast Network runs a Y2K Web site, which advises viewers to first "seek God's wisdom"—and then to take an inventory of the family pantry, since "it's impossible to know with certainty how long the crisis will last." CBN also offers a link to Walton, which is doing so much business that an order placed now will not be shipped before July, 1999.

For folks who can't wait, Barbara Guame in Stephenville, Tex., has launched her own home-based business, selling six-pound bags of wheat. "It makes a lot of sense to be prepared," she says. "Given that, we started thinking, what kind of Y2K cottage industry could we do?"

Meanwhile, Jan B. gets together with friends to unload grain into five-gallon drums and set aside stocks of sugar, salt, and seeds for the garden. "There will be significant change in our lives," she says. "It will impact our food supply, our fuel, our electricity, our phones, our whole economy... everything, even trash pickup. It's gonna be gross." But at least she won't lack for bread.

*By Hilary Hylton
in Austin, Tex.*



HORAK: Hoarders are "kind of freaking out"

president in charge of Y2K fixes. "As they delay, our costs go up." Cap Gemini says 65% of U.S. companies now see a risk of failure among trading partners.

Post-2000 repair and litigation costs could push spending higher still. Companies such as Blue Cross/Blue Shield of Michigan and Ford Motor Co. predict they'll keep getting bitten by the bug for years to come. Says Paul Gliesman, Y2K project manager at Blue Cross/Blue Shield: "You can fix this bug now, but you'll need to keep updating those fixes to make sure systems stay fixed in the future."

As for litigation, close to two dozen Y2K lawsuits have already been filed in the U.S. by consumers and shareholders claiming companies didn't warn them about Y2K costs. And many companies figure they could be targets for more suits. Motorola Inc. says it expects to spend as much as \$340 million by the end of next year on fixes—not including potential litigation costs, which it says "could be significant." Of chief concern: Motorola's 911 dispatch center equipment used by police, fire, and other emergency services across the country.

911 NIGHTMARE. In its SEC filing, Motorola says: "The most reasonably likely worst-case scenario involving [Motorola] is the failure of the public safety system on Jan. 1, 2000.... As a result, [Motorola] could potentially be sued as the supplier of those systems." Especially worrisome: Smaller communities that don't have the resources to fix their 911 systems. "The system won't crash, but the report dates will be wrong," says Charles F. Jackson, chief of systems planning for Motorola's Land Mobile Products Sector.

Motorola is insured, but many other companies are not. And it's getting harder to buy that protection. American International Group Inc., for example, says it has stopped selling policies designed to protect businesses from Y2K liability. And 49 states have already allowed insurance companies to exclude Y2K-related claims from overall commercial policy coverage.

Is there any way to avoid the Y2K mess? Commissioner Charles Rossotti of the Internal Revenue Service has a suggestion: "Congress could simply pass legislation postponing the date a couple of years," he quips. If only it were so easy.

By Marcia Stepanek in New York, with bureau reports

COMMENTARY

By Steven V. Brull

THEN THERE'S THE COST OF FIXING THE FIXES...

If you think the Year 2000 problem will be mostly solved when the millennium begins, think again. A cardinal rule of software development states that new bugs emerge whenever programmers touch software code. So get set for Y2K: The Sequel.

The aftermath—the cost to fix Y2K fixes—could add as much as 40% to the billions spent preparing for 2000—or more if companies start testing Y2K

that when companies try to fix programs, some 15% of newly introduced bugs aren't detected before release, according to Artemis' Jones. And when bugs are fixed, 7% of the repairs are faulty, with nearly half the new bugs capable of crippling an application or causing major errors.

As the millennium nears, companies may be tempted to throw more programmers at the Y2K problem. Even

THIS BUG'S FOR YOU

When companies try to fix programs, some 15% of newly injected bugs aren't detected before release



remedies too late, injecting even more errors, according to Capers Jones, chief scientist at software services company Artemis Management Systems. Businesses and consumers should brace for unexpected costs and disruptions spanning several years, warns Daniel D. Galorath of Galorath Inc., which sells programs that estimate software-development costs. "There's been a naive presumption, particularly among key economists, that a certain amount of money will be spent and then it will all be over," says Edward Yourdon, author of *Time Bomb 2000: What the Year 2000 Computer Crisis Means to You*. "It won't be."

In case anybody had missed it, the Y2K problem proves once again how dependent on software we are—and how critical it is to get smarter about using the latest tools for fixing and testing bugs and for managing software projects. Historical data show

now, about 90% of U.S. companies are behind Y2K targets by two to four months, according to Howard A. Rubin, chairman of the computer science department at Hunter College in New York. But Brooks's Law, rule of thumb coined by Frederick P. Brooks Jr.,

the author of *The Mythical Man-Month* says that adding programmers to a late software project only adds delay. Most companies consistently underestimate the time and cost of software development projects. But the Y2K problem ought to teach them to make smarter predictions.

Defense contractors, aerospace companies, and about 12% of the most tech-savvy corporations now can make accurate forecasts of the cost and time for software development projects using new techniques called parametric modeling. It's time for more companies to adopt those methods. Both customers and vendors of software need to become more realistic about problems in the offing. That at least, would be a positive aftermath to the Year 2000 problem.

Brull covers technology from Los Angeles

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INVESTIGATIONS

CITI: LAX HABITS TRIGGERED TROUBLE

A GAO report says rules were flouted, helping hide suspect cash

Was Citibank an unwitting pawn when Raúl Salinas de Gortari, the imprisoned brother of Mexico's former President, used Citi accounts to move millions in alleged drug and influence-peddling money out of Mexico? Or was the bank so eager to please the former First Brother that it turned a blind eye to suspicious activities and then designed a secretive plan to let him transfer more than \$90 million out of the country? According to a stinging General Accounting Office report set for release on Dec. 4, it appears to be the latter.

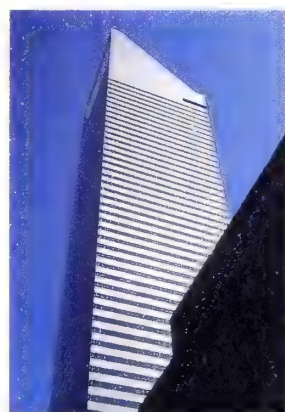
The GAO investigators note that when Salinas opened his Citibank account in New York in May, 1992, he told his private banker his funds came

By building a paper trail that only a few Citi officials could decipher, the GAO says, Citi may have frustrated one of the most basic rules for preventing money laundering. Says John W. Moscow, a senior investigator with the New York County District Attorney and an expert on money laundering: "The bank should not take actions that prevent law enforcement or auditors from tracking funds."

BAD TIMING. A spokesman for Citigroup, the company formed from the October, 1998, merger of Citibank parent Citicorp and Travelers Group, denies that the bank did anything wrong regarding

ance companies from combining. Senator Carl Levin (D-Mich.), who became the Permanent Subcommittee on Investigations' ranking Democrat next year, says he will push for hearing. "I'm very troubled by the GAO finding that Citibank facilitated a scheme that helped Salinas transfer and hide his gotten millions," he says.

The report does not explicitly say that Citibank broke any banking rules or laws. Still, the GAO findings are jarring, and make clear that Citi's anti-money-laundering policies are sometimes ignored. For example, it says Citi's New York private-banking section, which managed Salinas' accounts, failed internal audits in 1996 and 1997 because of deficiencies in due diligence and "know your customer" practices—guidelines that help detect suspicious activity. The report also says Salinas' private banker, not identified by the GAO, was widely believed to be Vice-President Amy



FOLLOWING THE MONEY TRAIL

How the Government Believes Salinas Moved Money



MEXICAN BANKS

Paulina Salinas alias Patricia Rios

Mexican peso checks hand-carried

Citibank Mexico*

U.S. dollars wired

Citibank account where client funds are commingled

VP at Citibank New York retrieves and wires funds

U.S. dollars wired



Accounts in name of Troc... an investment company created by Citibank for Salinas

*SALINAS HAD NO ACCOUNT BUT WAS ALLOWED TO CONVERT PESOS TO DOLLARS
DATA: GENERAL ACCOUNTING OFFICE



the Salinas accounts and says an investigation of Salinas by the U.S. Attorney in Manhattan prevents the bank from responding more fully to the GAO report. Salinas, who remains in jail in Mexico on charges of murder conspiracy and illicit enrichment, also denies wrongdoing. The Swiss government on Oct. 20 moved to seize \$95 million in Salinas accounts, claiming it has evidence the funds came from drug traffickers' pay-offs (BW—Nov. 2).

The report's timing couldn't be worse for Citi, which is experiencing post-merger turmoil. The study is likely to trigger congressional hearings next spring, when Congress takes up Citigroup's request to repeal laws that prevent banks, securities firms, and insur-

Elliott, violated Citi policy by not preparing a financial profile of her client to determine the source of his funds. Citi concedes that Elliott violated one internal policy but otherwise considers her an employee of good standing. Elliott declines comment. A Citi spokesman says the bank will examine the report to see if it includes ways Citibank can better combat money laundering.

NO REFERENCES. According to the report, Salinas' private banker, Paulina Castañón, Salinas' future wife, used an alias when transferring Salinas' funds. That way, even Citibank Mexico officials did not know who she was, the report claims. In an unusual relaxation of bank rules, Castañón also was allowed to take checks drawn on

from the sale of a construction company. The Citi official never asked for the name of the company or the buyer and did not inquire about the sale price. Over the next three years, Citibank assisted him in moving money from Mexico to London and Switzerland, using a process "that disguised the origin, destination and beneficial owner of the funds," according to the 21-page analysis by Congress' investigative arm.

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Mexican banks to Citibank Mexico, where they were converted to dollars, according to the GAO. Neither Castañón nor Salinas had accounts at Citibank Mexico, but the branch transferred the funds to Citibank New York. Because the banker had not asked Salinas for bank references, Citibank did not know whether the money from his Mexican accounts were legitimate assets.

The banker also activated a Cayman Islands-based "private investment company," Trocca Ltd., for Salinas to use in place of his own name. No documents existed to identify Salinas as Trocca's "beneficial owner," or as the individual who controlled the account, when his money flowed through some Citi branches. Citibank, says the GAO, keeps an inventory of dormant PICS ready to be assigned to clients. Tax evaders and drug traffickers have used PICS for years to elude detection, and regulators now frown on their use. But banking experts say PICS are legitimate vehicles.

BROKEN TRAIL. When the funds arrived under Trocca's name in New York, they were deposited into an account that commingled Salinas' funds with those of other customers, making it harder to track what individual clients were moving. From there, the funds were transferred to investment accounts in London and Switzerland. Each of these steps in the process "served to break the paper trail of the Mexican funds by disguising the origin and destination," the GAO states.

By the time Salinas was arrested in February, 1995, Citibank had collected \$1.1 million in fees from doing business with him. Only after the arrest did the bank prepare a financial profile of its client for its own records. Still, the GAO says, it omitted any reference to the Trocca accounts. Nine months later, after Raúl's wife was arrested in Switzerland as she was trying to withdraw money, Citibank made a criminal referral to the U.S. Attorney and placed the Salinas accounts on a watch list. Even then, it failed to mention the Trocca accounts, according to the GAO report.

Despite a freeze on Salinas' funds, Citibank retains control of some of the money and pays his mortgages and other expenses, the GAO says. It remains unclear whether Citi will ever face money-laundering charges. According to the GAO report, Citi's contention is that its only failing in the Salinas matter was a senior employee's violation of a minor policy. But even a minor infraction can cause a major problem.

By Paula Dwyer and Steven Solomon in Washington



RETAILING

MIRACLE ON MOST EVERY STREET

It's one hot holiday season—but shoppers could still balk

Grinch, schminch. What looked to be a lackluster Christmas for retailers suddenly looks downright cheery. Thanksgiving weekend was pretty much a blockbuster, and consumer surveys suggest more of the same through yearend. Irwin Cohen, co-chairman of Deloitte & Touche's Global Consumer Business Practice, figures November and December sales will rise as much as 6%, to \$174 billion, over last year—the biggest gain since 1994's 8% jump. "It doesn't get much better than this," says the notoriously bearish Carl E. Steidtmann, chief economist for PricewaterhouseCoopers' retail consultant group.

First and foremost, the cloud over the U.S. economy from the global meltdown has disappeared. The prophets of recession are in retreat, and the bull is back on Wall Street. Interest rates are falling, jobs are plentiful, and wages continue to rise. Consumer confidence headed back up in November after four con-

WHATEVER YOU WANT, KID: Merchants may witness record sales this year

secutive months of declines, according to the Conference Board.

But not everyone is convinced that consumers have forgotten what scared them a few months back. "It's not that people don't have money," says Wendy Liebmann, president of WSL Strategic Marketing. "But they are nervous about what 1999 is going to bring."

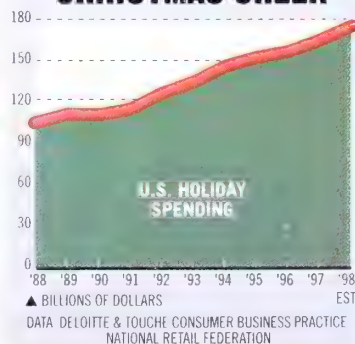
So retailers remain cautious, too. "I certainly don't want to be walking around with our heads in the clouds," says Kmart Corp. CEO Floyd Hall, even though his discount chain enjoyed record Thanksgiving sales this year—especially in electronics and toys.

BAD SIGN. Neiman Marcus Group Inc., the high-end emporium, says it's feeling the pinch despite the rebound in the stock market. "We had had five years of very steady growth, but when the market became volatile we began seeing some apprehension on the part of our customers," says H. W. Mullins, Neiman Marcus executive vice president.

Disappointing sales during the stock market swoon resulted in the chain racking up a 23% drop in profits for the quarter ended Oct. 31.

On Dec. 2, Sears Roebuck & Co. sent a chill through the market when it issued a second warning about fourth-quarter earnings. This time the culprit is weak app-

CHRISTMAS CHEER





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el sales. That's a bad sign for other department stores that are already under pressure from discounters and specialty stores.

So what's a smart retailer to do? "We are keeping our inventories in line, and we have contingency plans for a downturn," says Kmart's Hall. Kmart's plan? If it doesn't sell, mark it down—fast.

Indeed, while the economy remains strong and consumers are splurging on luxury items (box), retailers have trained

them to expect discounts and bargains—even in the middle of Christmas season. The biggest chunk of shopping is done in the last 10 days before Christmas and the week following, when retailers are most aggressive about moving the goods. "Every year, there seems to be a cat-and-mouse game between retailers and consumers," says Piper Jaffrey analyst Alan M. Rifkin. "And now that they've been schooled to wait in this game, the consumer usually prevails."

Still, the bottom line is a holiday shopping season that should make merchants merry. On Dec. 3, retailers were expected to report a 5% jump in sales for November, following a dismal showing the month before. Many retail experts say the Thanksgiving weekend bonanza did the trick. The question is: How much longer will they be thankful?

*By Stephanie Anderson Forest
Dallas, with Keith Naughton in Detroit
and bureau reports*

COMMENTARY

By Karen Pennar

COULD 'LUXURY FEVER' MAKE THE ECONOMY SICK?

Can we ever have enough? Personal spending keeps climbing, and this year will nearly reach the \$6 trillion mark. In real terms, total consumption will grow by 4.7% this year, capping six years of annual gains averaging a healthy 3%. More noteworthy, though, is the fact that even in this age of discounting, purchases of luxury goods and services are growing at about four times the rate of overall spending, says Cornell University economist Robert H.

Frank. And while everyone assumes that the rich and the near-rich spend on high-ticket goods, it's a phenomenon, says Frank, that in the 1990s has moved down the income ladder. More and more Americans, he argues in a new book by this title, have been gripped by "luxury fever."

It's an old saw, of course, that as incomes rise, luxuries become necessities. And it would be downright Scrooge-like to argue that such spending should be denied to people whose rising incomes now let them enjoy some pricey baubles. But the trend toward buying more prestige goods and services is troubling nonetheless. For some of the individuals who have taken to indulging, debt undertaken to finance spending may become onerous. And for the economy at large, spending on luxury items by all income groups may turn out to be highly discretionary—easily forgone in the time of a downturn.



SKIP IT: In a downturn, retrenchment could be brutal

Just how long can this high-powered spending last?

For now, there's no end in sight. The baby boom generation is in its peak earning and spending years. By 2000, predicts Edward E. Yardeni, chief economist at Deutsche Bank in New York, 35-year-olds to 54-year-olds could account for as much as 65% of personal income in the U.S., up from about 52% today. Increasingly, that income goes toward expensive goods, in part because those are the goods that people perceive to have value—both intrinsic and social. Luxury-brand vehicles, for instance, have been strong sellers and should gain 5% to 6% in volume next year, even though overall car sales are expected to slow, says auto consultant Christopher Cedergrén of NexTrend in Thousand Oaks, Calif.

Americans are feeling flush both because of rising incomes and soaring asset values. The seemingly un-

stoppable stock market has fattened portfolios, and housing prices have also done quite well, thank you. This growth in household net worth has added about \$120 billion to overall consumption levels since 1995, Goldman Sachs economists figure. Dormant inflation and an accommodating Federal Reserve Board in the wake of last summer's financial crisis also have loosened purse strings. To stop this trend, "you would have to materially change people's expectation of the future," says Gail Fosler, chief economist at the Conference Board.

But there's a downside to that spending pattern. The savings rate, albeit an imperfect measure, has dipped into negative territory. Consumer credit outstanding is growing at a 4.5% annual rate. Personal bankruptcies, meanwhile, surged nearly 6% in the 12 months ended on Sept. 30.

Most important, those people who seem best positioned to keep spending—those 35-to-54-year-olds—have no guarantee that their financial cushion will continue to be there. The stock market's retreat in the late summer and early fall didn't spook consumers. But a sustained bear market most certainly would. That would slow not only luxury fever but the economic growth it was fueling.

Senior writer Pennar focuses on economic issues.

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ED BY KELLEY HOLLAND

ING'S ASIA USE WEARS THIN

IT ON ASIA. THAT'S Boeing did when it aned on Dec. 1 that earn- will come in below ex- tions for at least two years—largely thanks ling orders from Asia s 747 cash cows. As a . Boeing will up its ed layoffs by 20,000, to 0 jobs by the end of . But analysts say that shouldn't bear all the : Boeing's cost struc- s too high and its pro- rity way too low. This it will show no profit \$35 billion commercial- ft business. Says ana- Nicholas Heymann of ntial Securities: "The hat there will be no

LOSING BELL

FATTER IMAGE

lay cheer came early to per Image, the retailer n for such offbeat giz- as the Weebot elec- c pet and the ionic wand. Its shares ed 180%, to 21% on 30, after it announced ksgiving weekend s were up 50% over . A little Internet fairy helped levitate the s, too: Web-site sales ed sixfold over the e period last year. But stock fell back 30%, to on Dec. 1 and closed 2% on Dec. 2.



23, '98 DEC 2
ATA BLOOMBERG FINANCIAL MARKETS

earnings rebound, even after laying off 20% of the work- force, is shocking."

A BLOW AGAINST IMPLANT LAWSUITS

THE CASE THAT SILICONE breast implants cause disease has suffered another setback. On Dec. 1, a panel of four independent scientists released a study showing no link between the implants and autoimmune disorders. The findings echo those in earlier studies: While the implants may trigger inflammation, they do not appear to cause systemic disease. The results bode ill for the thousands of plaintiffs claiming harm. Still, the largest study of implant risks, sponsored by the National Cancer Institute, won't be completed until 1999.

NO PROMISES FOR STEELWORKERS

FACED WITH A FLOOD OF low-priced imports, the steelworkers union wants emergency quotas. It argued for limits at congressional hearings on Nov. 30. But the White House is signaling it is only willing to negotiate "voluntary" quotas with Japan, Russia, and South Korea if all parties agree. Meanwhile, the Commerce Dept. agreed to expedite a dumping case filed by 12 U.S. steel companies and the union against Japan, Russia, and Brazil. Third-quarter steel imports, at a record 12.3 million tons, were up 56% from the same period a year earlier.

SATELLITE TV GAINS SOME HIGH GROUND

CHARLES ERGEN, MEDIA mogul: The EchoStar Communications CEO's \$1.1 billion Nov. 30 deal with News

HEADLINER: PAUL ALLEN

A MATCHMAKER FOR CABLE AND THE NET

Billionaire investor Paul Allen says he has a vision of a "wired world" for cable TV, turning it into a two-way Internet path.

Now, he's putting more money behind that vision. On Dec. 2, Microsoft's co-founder



announced he is paying \$20 million for an estimated 40% stake in High Speed Access, a Denver startup that provides Net access via cable, similar to services from @Home and Roadrunner.

Allen is expected to make HSA's service available to many of the 2.5 million cable subscribers

of Marcus Cable and Charter Communications, which he bought for \$4 billion five months ago.

HSA has only about 4,000 subscribers. @Home, backed by Tele-Communications, and Roadrunner, a joint venture of Time

Warner and MediaOne, have a total of nearly 400,000 customers.

Dataquest predicts that sales of cable modems will hit 2.4 million worldwide in 2002, from 492,000 this year. Meantime, cable-industry execs expect Allen to buy more cable systems.

By Ronald Grover

Corp. and MCI/WorldCom gives him control of more than half the satellite slots over the U.S. The deal is sweet revenge because it reconstitutes a February, 1997, pact that fell apart when News Corp.'s Rupert Murdoch backed out under cable-industry pressure. Ergen hopes to transmit local channels and break cable's dominance. But that could take time. With DirectTV, EchoStar "will be an effective duopoly in the DBS business," he says. "But we're still competing against a cable monopoly."

KELLOGG KEEPS ITS HEAD—SO FAR

IT'S CRUNCH TIME AT KELLOGG. The cereal maker said on Dec. 2 it will cut 765 jobs, or 20% of its North American white-collar workforce. The cuts come as Kellogg battles an onslaught of cheaper store

brands. With Kellogg shares off 26% this year, some investors are clamoring for the replacement of CEO Arnold Langbo. But the company dismisses such talk. And Cleveland Cavaliers owner Gordon Gund and the W.K. Kellogg Foundation together control 46% of the stock. "If there's going to be a change at the top, it's going to be driven by these two stockholders," says Prudential Securities' John McMillin.

ET CETERA...

- Gloria Steinem and about 12 other women will buy *Ms.*, which she founded in 1972.
- 3Com introduced an \$800 Palm handheld with wireless Internet access.
- Former Agriculture Secretary Mike Espy was acquitted of corruption on Dec. 2.
- US Airways will pay \$400,000 to 30 women execs after the Labor Dept found pay discrimination.



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EDITED BY OWEN ULLMANN

THE SENATE: A REVOLT THAT MAY BE GOOD FOR BUSINESS

Senator Charles T. Hagel of Nebraska is nothing if not gutsy. His challenge to the GOP Senate leadership was soundly defeated on Dec. 1, when fellow Republicans rebuffed his effort to oust Mitch McConnell of Kentucky as chairman of the National Republican Senatorial Campaign Committee. Unlike the unruly House, the Senate remains a bastion of decorum and tradition, and Republicans declined to symbolically rebuke Majority Leader Trent Lott (R-Miss.), who backed McConnell.

But beneath the Senate's placid exterior, discontent is bubbling up. And the insurgency of Hagel, a probusiness conservative, sent a clear message: Stop the partisan sniping and get back to legislating. Hagel may have lost, but there is reason to believe that his style of pragmatic conservatism will prevail in the new Congress. Stung by the failure on Nov. 3 to pad their 55-seat majority, Republican senators will press Lott to focus on issues that unite them, such as tax cuts, education, rather than on divisive matters like abortion.

What's more, the pressure will be on Lott to cooperate more closely with new House Speaker Bob Livingston (R-La.), another practical conservative, and the White House to pass bills. Republicans of all stripes are eager to shed the Senate's reputation as the legislative boneyard of the last Congress. "We've got to be for something instead of against everything," says Senator John McCain (R-Ariz.).

PRAGMATISM? Dissatisfaction with the GOP leadership is strongest among freshmen, who fear losing their seats—and control of the Senate—in 2000. Republicans will have 19 seats in the Senate, compared with 14 for the Democrats. "We have to focus on a positive agenda so we can govern or the American public will turn us out," warns Hagel, who was elected in 1996.

Corporate America is certainly rooting for Hagel and other mainstream Republicans to assert their influence. Business has been stymied by a do-little GOP in thrall to social conservatives, and it has found a friend in Hagel.

A former businessman from a state that depends on agricultural exports, Hagel has emerged as an articulate champion of U.S. global-economic leadership. He helped push the \$18 billion in fresh funding for the International Monetary Fund through the Senate this year and is leading the drive to curb the use of economic sanctions as a foreign-policy club. "Chuck Hagel has a very good understanding of how global issues affect our domestic economy," says Tenneco Chief Executive Dana G. Mead. Adds another CEO: "We've got to have more [Republicans] like him. The Religious Right appeals to a very small portion of the population."

That realization is starting to dawn on even some of the Senate's social conservatives. In a Nov. 30 speech, right-wing darling John Ashcroft (R-Mo.) focused on tax cuts and free-market ideas. There was nary a word on abortion or MonicaGate—once standard stump-speech fare for Ashcroft, a likely contender for the White House in 2000. "Republicans are fast approaching a point where the things that are dividing us are defining us," Senator Ashcroft told the Detroit Economic Club. "That has to end."

Will Lott & Co. heed the warning? A GOP agenda has yet to emerge, but there are signs that the Majority Leader will get down to business. He has vowed to seek an across-the-board tax cut and "keep the door open to cooperation with both the Administration and our Democratic colleagues" on Social Security reform and education initiatives. If the door to compromise doesn't stay open, count on Hagel and his business allies to be there banging loudly.

By Amy Borrus



HAGEL: The insurgent

CAPITAL WRAPUP

THE DNC CHIEF QUILTS

'Tis the season for sudden exits in Washington. Hard on the heels of departing House Speaker Newt Gingrich, Democratic National Committee chairman Steve Grossman stunned the party with a last-minute announcement at the he will not seek a second term. Grossman says family concerns prompted his decision. The Dec. 2 news, which came as a shock to DNC staffers, broke over a section of BUSINESS WEEK containing a profile of Grossman (page 76) already gone to press.

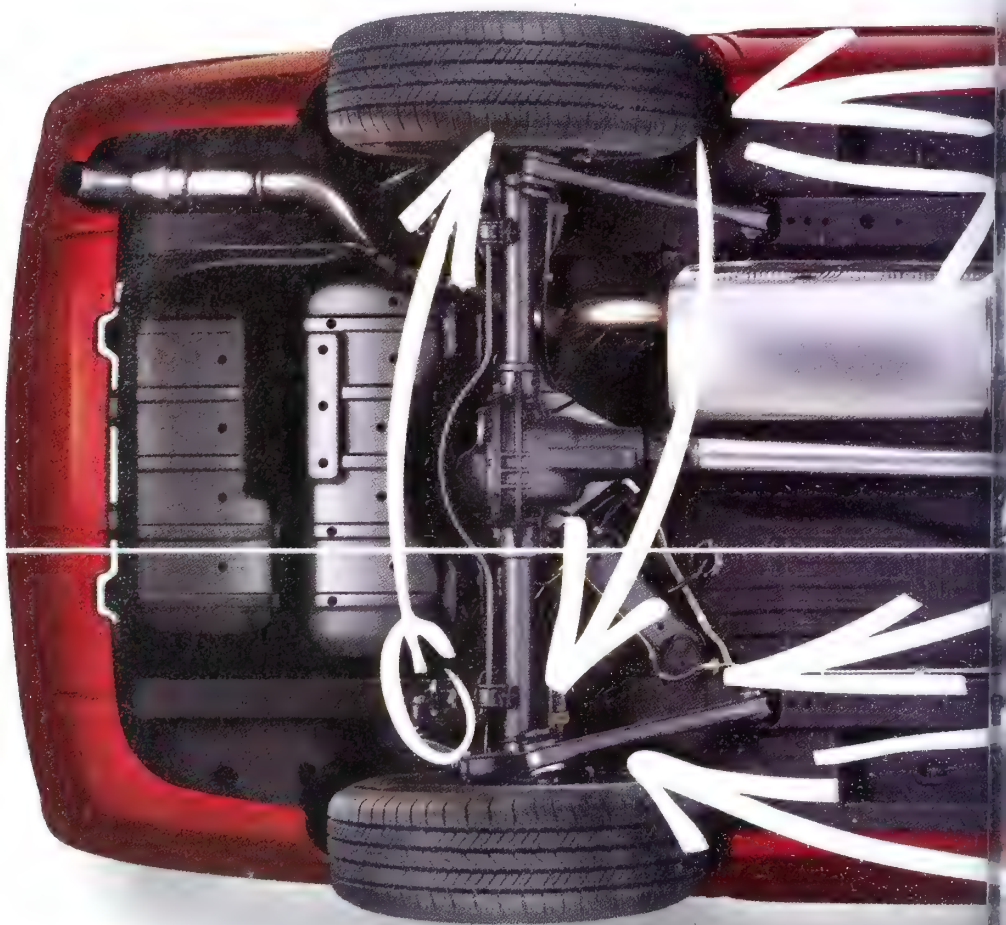
MCCAIN BOOSTER

► Plans for a Western regional primary in 2000 increase the chance that Arizona Senator John McCain will enter the Republican Presidential sweepstakes. Up to nine Rocky Mountain states—with more delegates than California—are expected to hold primaries on Mar. 11, three days before the Southern-fried "Super Tuesday" blowout. McCain aides are hoping a strong showing by the Western native son could be a springboard to the GOP nomination.

netreg@virginia.gov

► Virginia—home to such tech giants as America Online and Network Solutions—is the first state in the country to consider broad Internet legislation. Republican Governor James S. Gilmore III will send a package to his General Assembly in January that calls for a tax-free Net and industry self-regulation—up to a point. But he wants to criminalize dissemination of online child pornography and let local schools and libraries control cyber-surfing on their premises.

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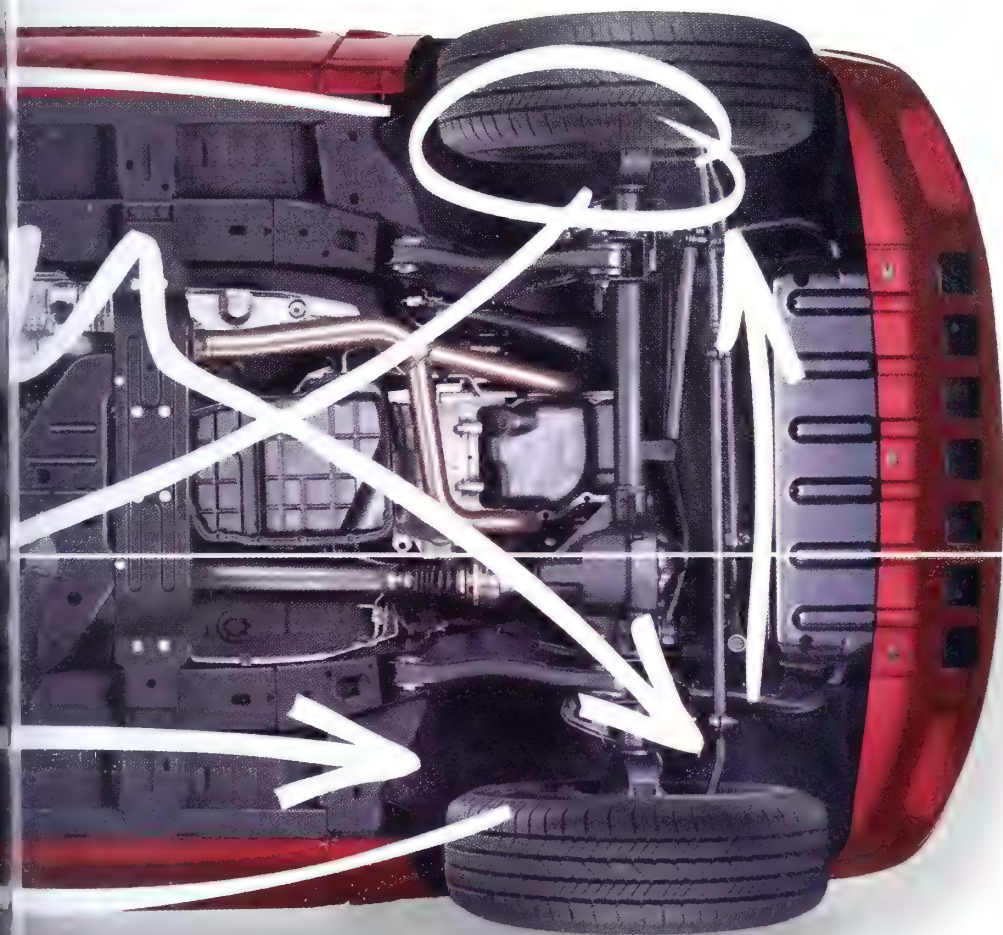
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SOUTH KOREA

SHOWDOWN IN SEOUL

Can President Kim finally get the *chaebol* to change?

'Taming wild horses" is how South Korea's Lee Hun Jai describes his job. But the animals in question aren't ponies romping on Korea's windswept slopes. Lee means the *chaebol*, the giant business groups that have ridden roughshod over the economy and whose gluttonous borrowing triggered Korea's meltdown last year. Lee, 54, is a civil servant whose zeal for reform has led to death threats. As chairman of the Financial Supervisory Commission (FSC), he must straighten out the financial and corporate sectors. He reshaped Korea's banks, but he's having a tougher time with the *chaebol*. "Sooner or later, we'll put the saddle on them," he says.

But wait. Weren't the conglomerates supposed to be so whipped by economic crisis that they would follow quietly along the path of reform? Weren't they pledging to sell assets, streamline operations, and emerge leaner than before?

It hasn't happened that way. The *chaebol* are fighting like cornered beasts to preserve the structure they know: one that values size over profitability, diversification over specialization, and massive debt over a solid equity base.

Korea's Big Five conglomerates—Daewoo, Samsung, Hyundai, LG, and SK—have actually strengthened their grip on the economy since the crisis be-



KIM: Pushing hard against determined resistance

gan. One year after Korea's momentous decision to seek \$58 billion from the International Monetary Fund, fundamental reform of the top *chaebol* is as elusive as ever.

The unwillingness to change has set the stage for a battle pitting President Kim Dae Jung and his reformers against Korea Inc. Kim has summoned the heads of the five leading *chaebol* to the presidential Blue House for an unprecedented session to demand reforms. Lee and other officials have laid down the law at recent breakfast

meetings, making it clear they expect to see big sales of assets. And they've drafted regulations to cap debt levels, mandate consolidated financial statements, and eliminate cross-guarantees for debt. **"REAL WAR."** Seoul is convinced that if the *chaebol* are not reined in, the economy could end up with not only a Japanese-style recession but also perhaps a second crisis. "This is the real war against our old backward institutions," says Lee Yoon Jae, a presidential economic adviser. "This is our last chance."

Despite tremendous achievements, the top *chaebol* suck up the economy's available credit, smothering opportunities for smaller businesses. Their focus on size rather than profits makes them squander capital. Their huge debts hold the banking system hostage, since no bank can afford to let a top company fail.

The showdown between the *chaebol* and the reformers comes to a head on Dec. 15. That's the deadline for the *chaebol* to present plans in keeping with IMF directives to improve corporate finances, reduce debt, and cut reliance on loans. As the deadline approaches, the government has crimped bank lending and restricted access to the bond market.

But there's still much to be done. Debt-to-equity ratios at the top 30 *chaebol* have swelled from 400% last year to 550% now. They have begged the government for more time to clean up their books—and used the breather to go on a borrowing binge. Domestic debt by the Big Five rose 12% during the first 10 months of the year, to \$128 billion. As banks called in loans, the big *chaebol* have instead raised \$40 billion peddling new bonds, commercial paper, and stock. "The more the government tries to merge them, the more they dig in," says one foreign executive.

Take Daewoo. Chairman and founder Kim Woo Choong has long aimed to become one of the world's top 10 automakers, from No. 17 now. Unwilling to let go of that dream, Kim is tripling Daewoo's capacity in Poland and

How the Top
Chaebol
Dominate...

THE ECONOMY Sales of companies controlled by Samsung, LG, Daewoo, Hyundai, and SK account for nearly half of Korea's GDP.

DEBT The top five owe the banks and bondholders \$128 billion, up

12% since the start of the crisis. The top five also account for 20% of all borrowing.

INDUSTRIES The leading *chaebol* control the country's semiconductor-manufacturing, carmaking,

and shipbuilding industries.

RESTRUCTURING The groups have restructured while 16 of the top 64 are going through workout programs with creditors.



export earnings and have used the cash to pick up new assets and prop up tottering old ones. So far, the top 30 *chaebol* have managed to boost gross assets by 20%, to \$351 billion. While many smaller *chaebol* are staggering—and 16 of the top 64 are in formal workout proceedings—the top five keep growing.

WIDER SPREAD. Hyundai keeps expanding, too. It's spending \$1.9 billion on sure money-losers in North Korea. And its recent takeover of Kia Motors Corp. means spending \$6 billion for a group whose debt is more than five times equity—and in a depressed auto market. Hyundai also snatched up a department store and a bank, and expanded its shipbuilding plant in Ulsan, already the world's largest. "It's unbelievable," says Kim Hun Soo, head of research at Merrill Lynch & Co. in Seoul. "Every single Hyundai company we cover saw its debts increase in the first half."

The *chaebol* insist they are making progress toward reform. Although Daewoo Chairman Kim bristles at demands for radical restructuring, the idea that Daewoo is resisting change is a "misunderstanding," says Lee Sang Hoon, Daewoo's senior managing director. He says disagreements are only over the timetable—not about change itself. The government wants rapid sales of assets, while *chaebol* executives say

pling in India. Yet the \$71.5 billion up can't sell all the cars it now es and has scaled back to just 53% apacity. In November, Daewoo and r auto makers were fined a total of million for forcing employees to their cars. "It's not only illegal. It's eally wrong," says Lee Nam Kee of Fair Trade Commission. ne of the reasons Daewoo—and oth—can finance such plans is the bank- crisis. The Big Five have taken ad-

vantage of state moves to pump money into the economy. With banks and investors reluctant to finance smaller companies, the big groups rake in the cash. More than three-quarters of all new corporate bonds and commercial paper issued this year went to the Big Five. Until the government put an end to the practice, the banks were the biggest buyers of the paper—although they should be reducing exposure to *chaebol* debt.

The *chaebol* are also enjoying sizable

they need time to pare down. Given their track record, that seems unlikely.

But never before has Korea had such a determined reformer as President Kim. "It's like a cop chasing a thief," says You Jong Keun, a provincial governor and presidential adviser. "If the cops are determined, they can usually catch the thieves." Still, it's going to take smart, speedy cops to corner the *chaebol*.

By Mark L. Clifford, with Jennifer Veale, in Seoul

DAEWOO It's ramping up auto production in Poland and India, despite a glutted world auto market and troubles at home.

SAMSUNG Failed in a bid to

take over bankrupt Kia Motors. Pressure is growing to pull out of its ill-fated \$3 billion auto venture.

HYUNDAI The carmaker is taking on a \$6 billion commitment

to buy Kia Motors, investing in North Korean tourism, buying a retailer and a merchant bank, and expanding its shipbuilding business.

DATA BUSINESS WEEK

How
Keep
inding

EDITED BY JOHN TEMPLEMAN

ARE SADDAM'S ENEMIES FINALLY TIGHTENING THE NOOSE?

For years, the West has played the foil for Saddam Hussein's game of cat-and-mouse. He would cheat, then retreat. The ploys bought time to hide weapons, avoided U.S. air strikes—sometimes barely—and left his adversaries divided and frustrated.

But the Iraqi leader is now facing some of the strongest threats to his regime in years—both inside and outside Iraq. For the first time, the Clinton Administration, with tacit allied support, is explicitly committed to Saddam's ouster. Although President Clinton grabbed headlines by pledging support for unspecified Iraqi opposition groups, his main hope is unrelenting economic pressure that may drive Saddam's inner circle to depose him. "His power base is becoming disillusioned," says Amatzia Baram, a Haifa University Iraq expert.

Strains are starting to show within the region. On Nov. 22, Izzat Ibrahim, a top military official was attacked by assassins but escaped. Meanwhile, there are signs that Saddam is rattled. He called his half brother Barzan al-Takriti back from Geneva and there is talk his trusted U.N. Ambassador Nizar Hamdoun is being recalled, too.

Still, the U.S. must keep the allies solidly behind economic sanctions. Until his narrow avoidance of a U.S. attack in November, Saddam had cleverly pitted the allies against one another: While the U.S. and Britain took a hard line, France and Russia wanted to ease the embargo. No more. The allies all back plans by chief U.N. weapons inspector Richard Butler for aggressive new efforts to uncover Iraq's arsenal.

To be sure, there's no guarantee that the U.S. can push Iraq's leadership to dump Saddam. But Clinton now has a way to focus their attention: the ability to bomb Iraq without going back to the Security Council if Saddam doesn't fully cooperate with U.N. inspectors. At the same time, the anti-Iraq

coalition has more cohesiveness than at any time since the 1991 Gulf War. Progress on Middle East peace and Clinton's visit to Gaza and the West Bank in mid-December will help keep Arab leaders on board.

Countries that once sympathized with Iraq may now stay on the sidelines, too. The French have been hurt by the perception that they're "willing to do just about anything" to get their wretched little contracts signed," says Geoffrey

Kemp, director of regional strategic programs at the Nixon Center in Washington. And its own financial crisis deters Russia from antagonizing potential aid donors. "The economic problems of Russia have come to the fore," says Alexei P. Andreev, first deputy chairman of the Duma's foreign affairs committee.

Saddam may try to undermine support for sanctions by being more conciliatory. But that won't work. Even if Iraq cooperates on its nuclear program, inevitable flaps over U.N. efforts to account for chemical and biological weapons and for Kuwaiti prisoners of war will ensure that the embargo stays in place.

So the White House is betting that if Saddam is ever to be toppled, the conditions are now better than they have been for years. Analysts believe that his grasp on power has weakened since 1995. That year, he faced the fourth coup plot since 1990, two sons-in-law defected to Jordan, and he was so worried about being exposed that he purged many family members from top positions.

Saddam kept his dwindling base loyal by arguing that he could wriggle out of the embargo. Provided the U.S. can stop its plan, that will be an empty boast soon. The message will then be clear: Sanctions won't go until Saddam does. Turning that realization into decisive action will be a hard step inside Iraq. But it's the West's best hope.

By Stan Crock in Washington, with bureau reports



SUPPORTERS: *Dwindling*

GLOBAL WRAPUP

WILL THE U.S. AID AZERBAIJAN?

► The powerful Armenian lobby has kept curbs on U.S. aid to archenemy Azerbaijan since 1992. But the embargo could end in the next Congress, thanks to the support of influential U.S. Jewish groups such as B'nai B'rith. The State Dept. wants the curbs lifted so it can be a neutral broker in the Azeri-Armenian struggle over the province of Nagorno-Karabakh. So does House Speaker-elect Bob Livingston (R-La.).

Jewish groups like Azeri policies,

particularly support for an oil pipeline from the Caspian Sea across Turkey that would undermine Iran. The Jewish groups also believe that Israel needs to cultivate more friends in the Muslim world. With 25,000 Jewish citizens, Azerbaijan looks like a good prospect.

QUEBEC SEPARATISM SURVIVES

► Premier Lucien Bouchard and his separatist Parti Québécois failed to create the "winning conditions" he wants for a third try at secession. In the Nov. 30 elections, the PQ got less

than 43% of the popular vote, a full percentage point less than the opposition Liberals. The PQ was able to hang on to 75 of the 125 seats in the provincial parliament thanks to its dominance outside big cities.

But secession isn't a dead issue. Bouchard, helped by a growing economy, seems to have convinced Quebec voters that the threat of another referendum could wrest concessions from Ottawa. So watch for him to work with other provincial premiers to bolster local powers as he tries to rebuild momentum for a breakaway.

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for long-term customer relationships.

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Despite political opposition and popular resistance, despite financial upheaval and frightened workers, monetary union is about to become reality in Europe. The idea of a single currency that would knit Europe into a world economic superpower has survived decades of skepticism. Now, on the threshold of the euro's launch, government leaders and independent analysts alike are breathlessly anticipating the Decade of Europe.

Yet even though monetary union has been years in the making, many economic players remain unprepared. That's dangerous. In the long run, if the euro works as planned, it will transform Europe from a jigsaw of costly, protected markets into a vigorously competitive economic bloc. But between now and then, banks and companies face a grisly shakeup. A Europe without currency barriers will offer enormous benefits to businesses that have

planned ahead, both technologically and strategically. It is also likely to prove fatal to those that have not.

The biggest, savviest global companies have already decided that the best way to succeed in the new market is to merge their way into even greater size and expertise. From Daimler-Chrysler's historic merger to Deutsche Bank's bid for Bankers Trust and Hoechst's marriage with Rhône-Poulenc, the recent megadeals by European companies have been aimed at getting into position for the euro zone. In many cases, they are looking across the Atlantic for new products, management skills, and financial sophistication to boost their competitiveness in the Old World.

The consolidation is just beginning. After America's regulatory "Big



MILESTONES ON THE ROAD TO MONETARY UNION

DEC. 31, 1998

Euro exchange rates are fixed. The European Central Bank takes over monetary policy for all 11 EMU nations. Stock and bond markets convert to euros on Jan. 4.

1999-2001

Foreign-exchange transactions denominated in euros. Companies are free, but not obligated, to use the euro, either exclusively or along with national currencies.

JAN. 1, 2002

Euro notes and coins must be in circulation in all EMU member states.

JULY 1, 2002

National currencies no longer legal tender.

Bang" during the 1970s, the number of lending institutions in the U.S. shrank from 15,000 to about 9,000. In overbanked European countries such as Germany and France, the carnage could be even more drastic. And 10 years from now, cross-border finance could be dominated by just a few dozen Europe-wide banking titans.

For companies, the prospect is not much rosier. Whether they cater to consumers or to other businesses, the euro will make it impossible for them to subsidize low prices in one country or region with high prices somewhere else. They must rethink their strategies, walking a fine line between building market share across the Continent and keeping

Special Report *The switch to a single currency, starting on Dec. 31, will cause carnage, consolidation—and, ultimately, profits for the forward-looking*

RO READY?

• margins healthy. As with financial institutions, mergers and takeovers lie ahead. Any U.S. company that does business in Europe has to be euro-ready, too. Yet until recently, many American executives underestimated the political and historical momentum behind monetary union. That could cost them business when better-armed rivals fight for new customers. Officers at Trust Banks Inc. in Atlanta say that although they began alerting their major U.S. corporate customers months ago about the January deadline for converting European financial data into euros, few have retooled their accounting systems to deal with the new currency. Delta Air Lines Inc., which competes with big European carriers on trans-Atlantic routes, is an exception. Of course, as in Europe, the more global the company, the more likely it is to take early action. General Electric Co. has a council of "euro leaders" consisting of executives from each of its European units who are pooling their experience in marketing, sales, finance, and technology to tailor a euro strategy to each business. And GE Capital Services Inc. is cooking up products for its U.S. customers who work in

Europe, including a credit card that can make electronic payments denominated in euros—the first of its kind.

On both sides of the Atlantic, the technical and logistical headaches loom nearly as large as the strategic issues. Making the transition is expected to cost Europe's companies around \$65 billion. The largest companies will pay some \$30 million apiece. Reconfiguring a single computerized parking meter to accept euros will set a city back about \$800. During the phase-in period between now and 2002, a business that wants to convert French francs to Deutschemarks, for example, must do it in two steps: francs to euros, then euros to marks. And to avoid errors in large financial transactions, which could be costly for them or their clients, banks must tally euro amounts to six significant digits.

If monetary union fulfills its promise, the payoff will be worth all this trouble. One European Commission study estimates that European businesses now spend some \$12.8 billion a year on currency conversions within the European Union, or 0.4% of the EU's gross domestic product. And economists at the new European Central Bank predict that as the euro forces greater efficiency and more aggressive strategies, it could add as much as one percentage point a year to Europe's long-term GDP growth.

Politics could still get in the way. Indeed, the real end of Europe's long road to integration won't come unless and until its national governments decide to join forces once and for all. Yet if companies prepare themselves for the changes ahead, they will turn Europe into a much more business-friendly place.

*By Joan Warner
in New York*

WHAT THE EURO WILL BE WORTH

DEUTSCHE BANK
FORECASTS FOR DEC. 31



\$1.18

U.S. Dollars

142

Japanese Yen

0.74

British Pounds

1.95

Deutschemarks

6.54

French Francs



WHERE THE BIG BANG WILL BE DEAFENING

In financial services, the euro watershed will come on New Year's Eve—presto

It looks like a typical November workday in the ornate trading room of the Amsterdam options exchange. Traders shout bids at each other—pencils in hand, phones clutched to shoulders. But they're clad in sweaters and jeans instead of their customary blue blazers. It's Sunday morning. And the trades are imaginary, part of a trial run to test the exchange's readiness to start dealing in euros. "If somebody doesn't make the switch on time, all of a sudden parts of the system won't be able to talk to each other," says George A. Möller, chief executive of the Amsterdam Exchanges, as he prowls the floor.



"We can't let that happen."

All over Europe and as far away as Tokyo and New York, the countdown to the euro is in its final days at banks, insurance companies, and stock exchanges. Weekend trials are taking place everywhere to prepare for what's being called Big Bang Weekend—the 90-hour period when one of the most

awesome financial projects in world history will be launched. The entire financial industry will have only from early afternoon on Thursday, Dec. 31, when the European Commission will set final exchange rates for the euro, until the morning of Monday, Jan. 4, to make an electronic conversion that involves trillions of bytes of data. Says Rob Rowley, chief financial officer of Reuters Group PLC: "There are people working on this around the clock."

SCRAMBLE. Unlike consumers and corporations, which will be able to cling to the old currencies a bit longer, finance houses have no choice about whether or not they will be euro-ready. For them, Dec. 31 is the watershed. The savvy banks and institutions have been positioning themselves for this development for years, inventing new services and invading one another's territory. And since size will be an enormous advantage in the euro zone, merger fever is climbing into the stratosphere. After the New Year, when stocks and most bonds will begin trading only in euros, the race to reap the rewards of Europe's new unified capital market will get hotter. Even the nimblest institutions risk losing opportunities

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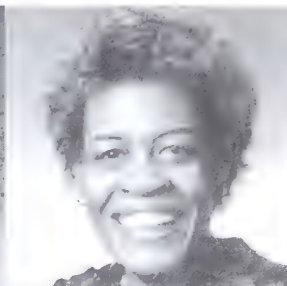
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Central banks, which must destroy all the old banknotes, fear counterfeiters will have a field day

to the competition if they're not prepared to jump into new financial niches as they arise.

Shifting to the euro currency will involve a massive financial and logistical expense. Spain's Banco Bilbao Vizcaya is spending \$70 million and giving its 23,000 employees some 175,000 hours of euro-related training. Munich-based insurance giant Allianz is pumping \$124 million in euro-related data processing



and is putting the equivalent of 342 years' worth of extra employee time into euro conversion. But that's peanuts compared with the strategic changes that the new currency will bring to European financial markets.

Skirmishes are already breaking out, for example, over which of the Europewide stock indexes will become the global benchmarks and which investment banks will dominate the new market in euro-based, high-yield debt.

Although euro bills and coins won't go into widespread circulation until the first few weeks of 2002, the prospect has some bankers quaking even now. There simply isn't enough vault space anywhere to warehouse all the euros. But it's the collection and destruction of old banknotes that worries banks the most. Central banks, which must verify the authenticity of the old bills before they're destroyed, are fretting about how to stop counterfeiters and money launderers from having a field day during the confusion. Some governments are even considering calling out the army to distribute the new banknotes, just as Bonn did when East German marks were exchanged for Deutschemarks during reunification in 1989.

HEADSTART. If all goes well, the changeover will begin with the flip of thousands of switches in financial programs worldwide. Teams of computer jockeys have been laboring, some for a year or two, to have software ready to go into action as soon as the EC posts euro rates on the Internet on Dec. 31. European banks are lobbying for an early-afternoon posting, to buy a few extra hours. Rivals in New York will lose precious conversion time, because they can't shut their systems down until the market closes on Wall Street. Since that's not until 10:30 p.m. Continental time, the Europeans will have a headstart.

During New Year's weekend, software programs will be checked and rechecked for accuracy. A tiny system bug could wreak havoc, sully the euro's reputation before a single bill is issued. With teams of programmers planning round-the-clock vigils and with backup teams of brokers and bankers on alert in case of trouble, London hotel space is already tight for Big Bang weekend. Morgan Stanley alone has 100 rooms reserved. Local authorities have declared a parking meter holiday to handle the expected volume of cars in the City of London. Cafeterias will be open and serving

through the weekend. Some shops even plan to keep champagne on ice for programmers toiling on New Year's Eve.

The pressure won't let up after Big Bang Weekend, though. Banks must keep scrambling to adapt their strategies to the new competitive realities of the euro zone. It is widely believed that creating a unified currency market will bring massive expansion to European equity markets, now only one-fourth the size of the U.S. market. Even before the euro arrives, demand for asset management products with Europewide portfolios has exploded. For instance, assets of DWS's formerly stodgy Eurovesta fund have more than quadrupled since April, when it was reoriented to invest in a European growth portfolio. A DWS Europewide small-cap fund has jumped from zero to \$600 million in assets in about the same period.

FEW SURVIVORS. With foreign exchange revenues falling as the 11 currencies turn into just one, the banks must stake out new businesses. Germany's Commerzbank is investing heavily to become a major player in euro-based cash- and liquidity-management systems for companies, going up against such competitors as Citibank, Chase Manhattan, Deutsche Bank, and ABN-Amro. "Only a few banks are going to survive in this business, and we want to be one of them," says Peter Wolf-Köppen, Commerzbank's guru on implementation of the euro.

Battles are also heating up over who will be in control of the euro-based money transfer system. That's bad news for the new European Central Bank, whose Target clearing system is already beset by new rivals, including Germany's Bundesbank. The ECB has been forced to slash its fees on the system even before the euro has arrived.

The coming weeks pose huge impediments for investors. Some market analysts fear that the uncertainty will cause equity trading to dry up in mid-December and revive again only in mid-January, once the dust has settled. Euro-based debt and currency markets, on the other hand, are expected to explode in early January, partly fueled by heavy foreign buying. Some economists predict heavy demand for euros in Asia by investors hungry to escape near-zero interest rates at home and diversify their heavy stakes in the dollar. Indeed, Nomura quickly sold out three euro-denominated bond funds it has launched in Japan since July.

If the optimists are right about the end of Jan. 4 will bring unprecedented opportunities for investors and the banks that serve them. A deeper, more sophisticated market could finally give Europe's financial institutions the global competitiveness they have sought. But only those poised to capitalize on the many changes will thrive. Big Bang Weekend is only the first of a long range of tough tests.

By Thane Peterson in Amsterdam, Margaret Popper in Madrid, Andrew Osterland in Chicago, and Brian Bremner in Tokyo

EUROPE'S 'BIG BANG' WEEKEND

THURSDAY, DEC. 31

During the afternoon, the European Commission fixes the euro's value against the 11 EMU members' currencies, posting the rates on the Internet.

Banks and stock exchanges plug the data into their computer programs.

JAN. 1 TO JAN. 3

At financial institutions all over Europe, teams of data processing experts double-check new euro software. Many historical data are recalculated. Teams also work round the clock in New York, Tokyo, and other financial centers abroad.

MONDAY, JAN. 4

When the markets open, European stocks, options, and government bonds trade only in euros. Bank statements show customers' accounts in both local currency and euros. Some big companies adopt the euro for internal accounting.

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READY, SET—RETOOL

Companies figure the faster they can convert, the better

European industry is about to get the single currency it so ardently wished for. Chief executives across the Continent have lobbied long and hard for monetary union, envisioning a time when they could build plants, sell products, and raise capital in other European markets without giving currency fluctuations a thought. But now that the day has nearly arrived, reality is sinking in. Many of the most dramatic benefits of the European Monetary Union, far from being automatic, will come slowly—and only to companies that are prepared.

To be euro-ready, most multinational companies will need to invest millions of dollars. DaimlerChrysler, for instance, is spending some \$120 million up front to shift to the euro. Even more important, they must formulate a strategy to make the most of monetary union. Besides revamping their technology, companies may need to redefine their notion of competitiveness as the European market becomes more integrated. Those that can use low pricing and economies of scale to build a Con-

A few pioneering companies, among them the Netherlands' Royal Philips Electronics and German engineering behemoth Siemens, are taking a Big Bang approach and switching all their internal operations immediately. The logic: The sooner they take the pain, the greater the gain. Indeed, Europe's biggest companies, eager to benefit from a borderless European market, have been strong advocates of a single currency for more than a decade. Royal Philips Electronics, for one, will be euro-ready on the

first business day of 1999.

But most companies operating in Europe—including French chemical giant Rhône-Poulenc, U.S. computer maker Compaq and German auto maker BMW—plan a two- or three-phase transition. Phase One, preparing to account for sales and purchasing in euros, is nearly complete. Phase Two, the internal accounting transformation for everything from research and development budgeting to tax reports, will take place over the next 12 to 18 months.

"NEW THINKING." During that time, many companies will operate with a dual internal accounting system that puts the local currency and the euro side by side. That's what executives are planning for Rhône-Poulenc's companywide operations.

But middle managers will decide how quickly to shift their individual units to the euro. They're likely to hurry however, since the Cor-

**THE EURO
MULTINATIONALS**



continent-wide presence have the best shot at becoming the new Europe's corporate winners.

Retooling for the euro is expected to cost European business \$65 billion between now and July, 2002, when the old currencies disappear. Nonfinancial companies can expect to spend roughly 0.5% of annual sales adapting software systems to the euro, industry experts calculate. Yet most executives believe that up-front investment in conversion to the euro will pay off in a competitive advantage as companies scramble to broaden their reach across a single-currency continent. "We will be able to build market share quickly all over Europe," says Gabriel Martín Ocaña, assistant finance director at Puleva, a \$246 million Spanish dairy-products maker that plans to invade Northern Europe with low-priced goods.

continent's chemical giants are already in a fierce battle to grow more market share. "No one is obligated. They can be proactive, or they can delay. But if they delay, they may miss an opportunity," warns Yves Schell, euro coordinator for Rhône-Poulenc.

Most companies will have the software in place to handle external financial transactions in euros starting Jan. 1. In every European country where multinationals handle payments and receivables, they have set up separate, euro-denominated bank accounts and put division heads in charge of the switch-over. For months they have been training executives, sales staff, and marketing managers to cope. Although few will require payments in euros immediately, many will insist that customers choose one currency for the transition.

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period and stick with it to avoid confusion.

The final step in the euro changeover will be paying taxes and switching over the corporate payroll. Since few governments will be prepared to accept tax payments in euros starting in 1999, corporate finance officers are not rushing to switch their internal procedures. And since individuals won't be using euro bills and coins until 2002, most companies won't change their payroll systems to euros until then. However, many companies will start translating the net salary figure on pay stubs to euros starting in January. "We want [employees] to get used to the new thinking," says Eva Schwarzfischer-Helten, deputy head of BMW's euro project.

SURVIVAL OF THE FITTEST. Complex and costly as the nuts and bolts of the transition may be, Corporate Europe's bosses say the strategic issues surrounding the arrival of the euro are far more critical to companies' survival. They predict that the single currency will prompt savage price wars that only the fittest will survive. Today, the wholesale price of most products varies from 30% to as much as 200% within the euro zone, according to industry experts. Come 1999, pressure to bring prices down will be dramatic, slicing the profits of companies that are not prepared. "The benefits of the euro are marginal if you screw up pricing," says Nicklas Garemo, euro project

HOW COMPANIES WILL GET EURO-READY

STEP ONE

Adapt computers to bill customers and pay suppliers in euros. Maintain dual accounting in euros and national currencies.

STEP TWO

Convert transactions such as budget allocations and payments between subsidiaries into euros.

STEP THREE

Change over human-resource functions, including payroll and benefits. Pay taxes in euros.

leader for McKinsey & Co. in Goteborg Sweden.

Well-managed companies aim to wield lower prices to grab market share across the Continent. To prepare for the coming price wars, they already have begun cutting costs to protect their margins. French auto parts maker Valeo recently launched a major restructuring of its European operations to generate double-digit productivity gains in manufacturing, distribution, and marketing networks. And in Spain and Portugal, where prices are well below the European average for most products, many domestic companies aim to invade higher-priced markets to the north.

Companies with a wide spread of prices across Europe may initially try to settle somewhere in the middle of the range by lowering prices in some countries and raising them in others. But raising prices may make products uncompetitive in some regions. Ultimately, companies may decide to abandon products or markets where they can't match the lowest-cost producer. "There will be a lot of confusion in the first year

says Michael Littlechild, a partner at KPMG Peat Marwick London. But it's likely that survivors of the shakeout will be the companies that got a headstart in remaking their systems and strategies for the euro zone.

By Gail Edmondson in Paris, with bureau report

'THIS IS GOING TO BE AN EARTHQUAKE'

Euros may transform Europe into a bargain hunter's dream

In the Tuscan village of Fiesole, known for its ancient Roman amphitheater and deep red Chianti, shoppers are exploring Europe's financial future. Last spring, the town's banks exchanged lire for ersatz euro notes, urging citizens and shopkeepers to try out the new money. Local authorities wanted to see how the euro affected buying patterns. The result, says Luca Diamanti, who runs a downtown bar and grocery store, was a mass of timid shoppers. Although people were willing to carry the new currency, they spent it only on small items—nothing much bigger than a cappuccino or a pack of cigarettes.

Diamanti, who changed his fake euros back into lire as soon as the experiment ended, was unimpressed. "I leave changes to people who understand them," he says.

That's a luxury he won't have for long. In a month, the lira, peseta, franc, and mark will technically be nothing more than denominations of the new currency—mathematical crutches for slow adapters. Even if consumers aren't yet using euro notes and coins, their bank accounts, retirement funds, and in many cases paychecks will be expressed in eu-

ros. So smart retailers are already scheming to cash in on the new regime. As they gear up to take advantage of the true continental market, they will change forever the face of buying and selling in Europe. Says Erin Anderson, a professor at INSEAD, a business school outside Paris: "My sense is that this is going to be an earthquake."

The potential payoffs of this seismic event are immense. Over time, Europe could turn into a bargain hunter's paradise as currency transparency—created by a money everyone understands—drives down prices of many European goods. More important, the euro will transform the shopping environment, as huge retail chains spread across the region unfettered by money differences. That could eventually unleash a U.S.-style consumer spending boom and give an economic boost to the entire world.

BULK BUYING. Retailers see plenty to worry about. Already a merger spree is under way, as the biggest among them reach across borders. Greater scale should allow them to negotiate lower prices with manufacturers—and pass them on to consumers. The mergers also prepare Europe's big retailers to battle powerful newcomers, such as Wal-Mart Stores Inc. But the quest for bulk leaves smaller retailers, from grocery chains to corner cheese shops, quaking.

Businesses of all sizes, meanwhile, are grappling with dual labeling. The old currency units won't disappear until next 2002, and many consumers may use them till the last minute. But stores must be able to cater to more progressive shoppers, too. Retagging every item is more than just a logistical hurdle. It also raises pricing questions. Take a German grocer whose goods are at eye-catching prices such as 3.99 marks or 9.99 marks. Converting these amounts into attractive euro



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ures may involve cuts that eat into margins.

To make up for losses, stores may nudge other prices up. But they risk the wrath of suspicious shoppers. Fifty-year-old Edith Guetal, a Paris bank worker, shudders at the thought of euro pricing as she shops in the grocery section at the Prisunic store on the Avenue des Champs-Élysées. "We've got to keep an eye out to make sure they don't use this change to raise prices," she says.

The first big decision for retailers comes next month, when they must figure out whether to accept old currencies, euros, or both. McDonald's Corp., for example, plans to accept two or three European currencies at the fixed euro rates in its restaurants that lie near borders. This means that harried cashiers in the German town of Aachen, near Belgium and France, will have to make fast change in three moneys for the cheeseburger special. In the past, businesses could impose their own inflated exchange rates, raking in extra cash for the impromptu bank service. But with the euro's strictly

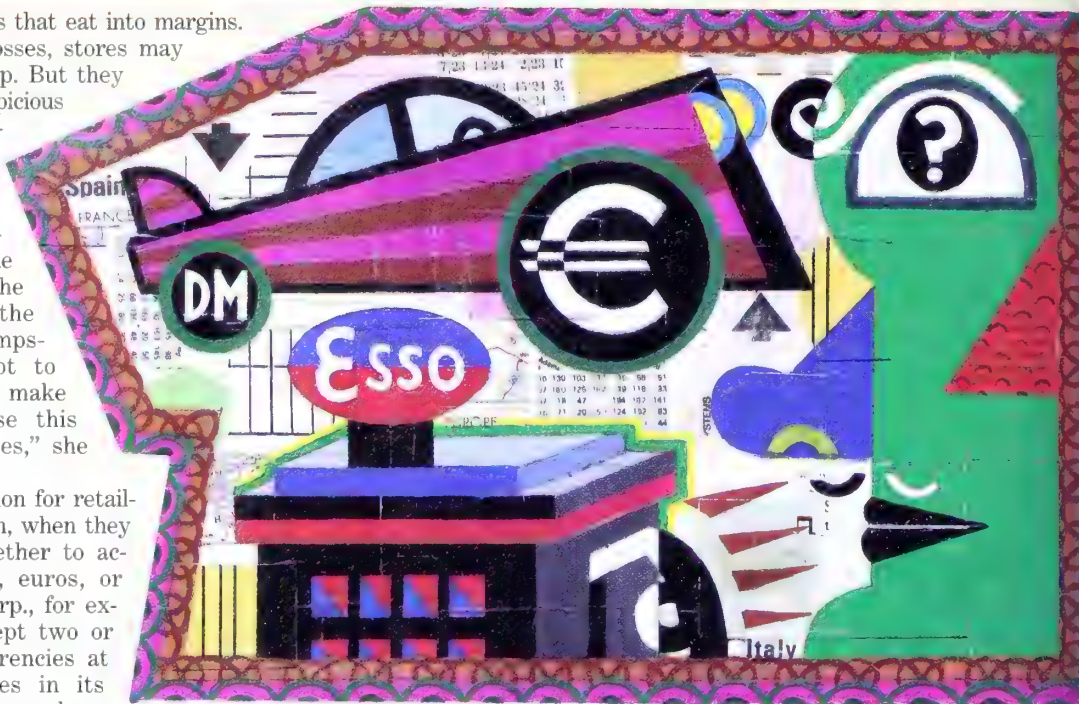
THE EURO

frozen rates, businesses must provide the most precise change possible.

Nevertheless, retailers see the coming of the euro as an opportunity to win loyal, long-term customers by making the transition as easy as possible for shoppers. From German food chain Metro to Spanish department store El Corte Inglés, stores are posting informational signs and labels and distributing cartooned brochures to guide consumers through the change.

BORDER CROSSINGS. But while focusing on customers, retailers cannot lose sight of rivals. Indeed, the biggest stores are expanding their presence throughout Europe to exploit the scale of this newly seamless market. For many, mergers are giving them the muscle they need to push across borders. "The euro is going to spur retail consolidation," predicts Amita Gulati, a European retail analyst at Paribas Capital Markets Group in London.

For a glimpse of the coming battle of the titans, retailers need look no further than Germany, where Wal-Mart, with 21 discount warehouses, has been making waves for a year. In its Karlsruhe store, with U.S.-style aisles that are wider than some local streets, the U.S. giant is teaching Germans the joys of discount shopping. Shelves abound with bargains, from Beaujolais



Nouveau to Norwegian salmon. The euro will let Wal-Mart offer more cheap goods from all over the European Monetary Union region—giving shoppers accustomed to conservative regional markets a riot of diversity. To keep pace, European stores must do the same. "In our history, there's a Before Wal-Mart and an After Wal-Mart," says Jean-Paul Font, a retail-management consultant at Sema Group in Paris.

Eventually, these greater choices could provoke a buying

boom, predicts INSEAD's Anderson. Europeans relax their nervous grip on savings and hunt for bargains. But initially, retailers could face a hiatus of six months to a year, as Europeans postpone big purchases while they wrestle with the new money. Anderson Consulting tracked French expatriates recently arrived in the U.S. and found that buying took a few months to ramp up. "Their consumption was down, because at first they didn't really understand the price," says Valerie Simonnet, an Anderson consultant in Paris.

Europe's currency switch promises to be a wild ride. But between now and the appearance of euro bills and notes in three years, Europeans have plenty of opportunities to practice. Chip-bearing "smart" cards denominated in euros will make their appearance quickly, allowing shoppers to pay euros for baguettes and newspapers. For bigger euro buys, growing numbers of Europeans are likely to shop the euro zone via the Internet. Indeed, by the time the marks, francs, and e vanish for good in 2002, the euro revolution will have already worked much of its magic in the marketplace.

By Stephen Baker and Inka Rehder in Paris, with William Echikson in Brussels and Monica Lerner in Rome

WHY THE EURO IS GIVING RETAILERS NIGHTMARES

TEETHING PAINS

Enticing prices such as DM9.99 won't look so good in euros, and rounding the euro price down will slice margins. Retailers may have to make up the difference by repackaging products.

ANXIOUS BUYERS

Worried that stores will use the euro to hike prices, shoppers will be on the lookout for gouging. Any upward moves may send them scurrying to rivals.

DOUBLE ENTRIES

Retailers who deal with multiple European currencies will have to offer exact conversions, without collecting a cent for the service. During the euro's 2002 phase-in, they foresee accounting and logistical snafus.

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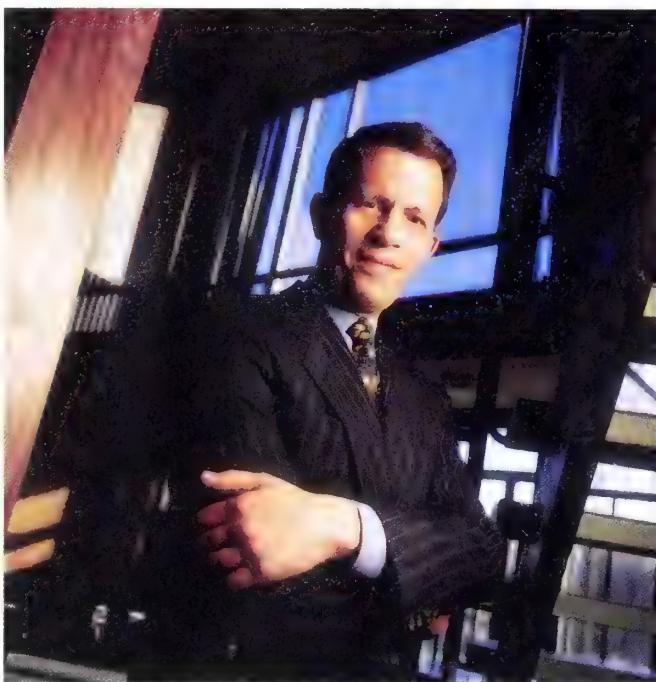
A DEMOCRAT WHO'S ALL BUSINESS

How Steve Grossman has reversed the party's fortunes

When Boston business exec Steve Grossman tossed his briefcase into the ring as a candidate for chairman of the scandal-racked Democratic National Committee in 1997, friends thought he had taken leave of his senses. They're not scoffing now. Though the party remains in debt, the Dems' strong showing in the midterm elections has sent Grossman's stock soaring.

As a result, Grossman is a shoo-in for a second term. The contrast with his counterpart couldn't be starker. Republican National Committee Chairman Jim Nicholson, a former Colorado real estate developer, faces possible political foreclosure when his party meets in January. He's under fire from GOP conservatives and moderates alike for failing to fire up the grass-roots troops and articulate a message.

CEO SKILLS. Message isn't Grossman's strong suit, either. He matches Nicholson cliché for cliché—and once drew hoots for describing President Clinton as an exemplar of “moral leadership.” Grossman's forte is applying his business skills to a DNC that has often been run like a mom-and-pop grocery. A graduate of Princeton and Harvard Business School, Grossman, 52, developed those skills over the course of the two decades he has spent running the family business, Massachusetts Envelope Co.



As national chair, he has been content to operate behind the scenes, leaving the public advocacy to Colorado Governor Roy Romer, the general chairman. Grossman “has brought sound business principles to the DNC,” says Democratic contributor Jeffrey Hirschberg, a vice-chairman of Ernst & Young. “Given where the DNC was when he took over, he delivered more than anyone had any right to expect.”

Grossman's first step was to draft a management plan setting priorities, increasing accountability, and containing costs. Job one: attacking the DNC's chronic debt. When he assumed control, the party was \$18 million in the red and was stifling consultants. The DNC was also still under a legal cloud over allegations that it was a pawn in the Clinton-Gore reelection campaign's questionable fund-raising schemes. While rumors of bankruptcy swirled, Grossman promised that the DNC would be like a venture-capital firm: With strategic investments in '97, it would help generate

political profits on Election Day '98. Grossman focused on stroking donors and wooing fat cats back via a blitz of fund-raisers starring the President and First Lady. Those events cut debt in half. “We acknowledged our mistake and took responsibility,” he recalls.

As the money began to trickle in, Grossman created a new compliance division to better screen for tainted donations. And he beefed up direct-mail and phone solicitations to widen the party's money base beyond a core of aging liberals. One new target: high-tech entrepreneurs. The result was more than \$9 million in donations, a record for a midterm campaign.

JUST SAY NO. Grossman could have shaved the debt even more, but he decided to borrow \$3 million for last-ditch spending on ads and get-out-the-vote efforts. In defending that decision, Grossman says, “The bottom line of a political party is not the level of debt you maintain but what happens on Election Day.”

Spoken like a true pol, but Grossman was all business when it came to divvying up sparse DNC funds to candidates. Only the most important got cash. “To be ruthlessly efficient, you have to say no,” he says. That upset some party officials. But on Nov.

TOUGH LOVE

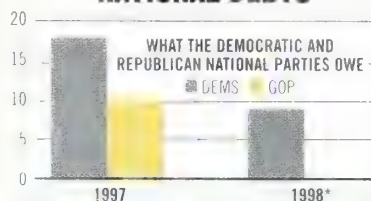
A hard-headed businessman, Grossman targeted high-tech donors then funded only key races

Grossman could point to Nevada, Washington, and North Carolina, where Democrats scored wins in tough House and Senate races. “We came into Election Day with a game plan, a message and sufficient resources to win,” crowed Democratic Business Council Chairman Tom Hendrickson.

So what does Mr. G do for an encore? First, he faces the unenviable task of trying to erase that \$9 million debt before the 2000 Presidential election. He also has to shore up state organizations, many of which remain outgunned by the GOP. But as he toils, at least Grossman has this satisfaction: While he's concentrating on his 1999 business plan, Jim Nicholson over at the GOP is worrying about survival.

By Richard S. Dunham
in Washington

NATIONAL DEBTS



▲ MILLIONS OF DOLLARS *GOP DECLINED TO RELEASE FIGURES

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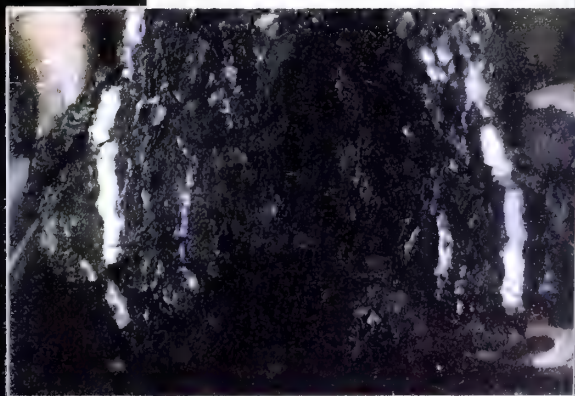
ENERGY

THE WORLD'S NEXT POWER SURGE?

Vast reserves of frozen gas in the ocean floor may be a godsend—if they can be tapped

To the untrained eye, the whitish deposits hauled up from sediments under the ocean floor might look like veins of ordinary ice. But ice doesn't normally sputter and crackle as it melts—and it certainly doesn't catch fire when you put a match to it. These deposits are nodules of methane-bearing ice known as gas hydrates. Found in thick layers in the Arctic permafrost and along the margins of the continents—hundreds of feet beneath the ocean floor—they may be the world's best hope for a nearly inexhaustible energy supply in the coming millennium.

"This is a huge resource with a lot of unknowns," says Arthur H. Johnson, a senior geologist at Chevron Corp. Among the questions: How much trapped gas is recoverable? Can the extraction methods ever be made economical? And if they can, what would that do to the global energy industry?



BURSTING WITH ENERGY: Frozen nodules of gas hydrates (above) release methane (left) when melted

Wracked by falling prices, the oil companies face wrenching consolidation, which the merger of Exxon Corp. and Mobil Oil Corp. is just the presumed first step. And gas hydrates share an undesirable characteristic with other fossil fuels: Scientists say they can contribute to global warming.

POWER-HUNGRY. Rig workers are all too familiar with these icy minerals, because they can interrupt oil production. Gas hydrates are stable only at very low temperatures and high pressures. Even then, they crumble and shift position as the methane breaks down, weakening the sea floor and triggering slides that can rupture pipelines and oil wells. At extreme cold, hydrates also crystallize spontaneously in pipelines, causing natural gas clogs that cost tens of thousands of dollars to unplug. "The industry never thought of these minerals as lemons," says E. Dendy Sloan, a Colorado School of Mines geologist. "Our challenge is to turn them into lemonade."

That endeavor began about five years ago, when geologists started to realize

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It's tough to categorize the 1999 Dodge Intrepid. On the one hand, it has a lease rate that's lean and a price tag that's mid-size. Yet Intrepid offers so much interior space that it's officially recognized as a large car by the EPA. Its standard aluminum engine delivers a stingy EPA estimated mpg of 21 city, 30 highway, yet it generates a stout 200 horsepower. That's more power per liter than any regular-fuel V-6 engine available today. And while Intrepid's ride is supple, its handling is crisp and controlled. Large car, mid-size car, family car, luxury car, sports sedan. That's not a paradox, it's an Intrepid. Dodge Intrepid. We're changing everything. Again.

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that hydrates—if they could be mined from bottom sediments—will be a godsend for countries that are power-hungry and energy-poor. Underneath hydrate layers are found all over the earth, and contain as much as 270,000,000 trillion cubic feet of natural gas, according to Keith A. Kvenvolden, a geologist at the U.S. Geological Survey in Menlo Park, Calif. That corresponds to twice the amount of carbon contained in all other coal, oil, and conventional gas reserves combined—enough to wrap the entire earth in a blanket of gas 130 feet thick.

Not surprisingly, the race is on to analyze and retrieve these frozen resources. Royal Dutch Shell Group and Chevron are in a study mode, but both Japan and India—with few natural resources of their own—already have

Nak, a consulting firm sending the natural-gas and oil industries.

Harvesting gas from hydrates is especially tricky because the methane occurs in a solid form that is widely dispersed. Even studying the deposits is a challenge, because companies don't want to drill special wells to measure a resource they may not be able to tap. So geologists use indirect methods such as seismic sampling: pumping sound waves into the earth and finding hydrate sites on the principle that sound moves faster through gas-bearing sediments than through solid rock. Unfortunately, such techniques reveal little about the volume or concentration of hydrate present. This matters because, for now, only the

stalls the retrieval effort. To get around this, engineers are looking for an inexpensive way to pump hot water or antifreeze-like chemicals directly into the hydrate layer (table) to liquefy it.

KEY TEST. The MacKenzie Delta on the Arctic Ocean in Canada's Northwest Territories has been a key testing ground. Earlier this year, teams from Japan, Canada, and the U.S. sank a shallow well in the tundra and discovered that hydrates occupied 50% of the "pore space" between grains of sediment. In all, gas hydrate made up about 20% of each coreful of sediment extracted, says Scott R. Dallimore, project leader of the geologic survey of Canada.

Working on land, of course, is relatively easy. Will such techniques work undersea, where most hydrates lie? The test will come next year, when the Japanese are scheduled to attack deposits on the Nankai Trough in the ocean east of Tokyo—a region that may hold as much as 1,800 trillion cubic feet of methane locked in hydrate. They have to lower a drill through 3,000 feet of water and then dig down at least 1,000 feet more.

Environmentalists worry that a new cheap source of natural gas could fuel consumption, exacerbating global warming. But leaving it in the ground doesn't solve the problem. Some climatologists believe extreme weather conditions affecting temperature or pressure spontaneously release huge quantities of methane from hydrates into the atmosphere. Methane is an even more potent greenhouse gas than the carbon dioxide released from burning fuel.

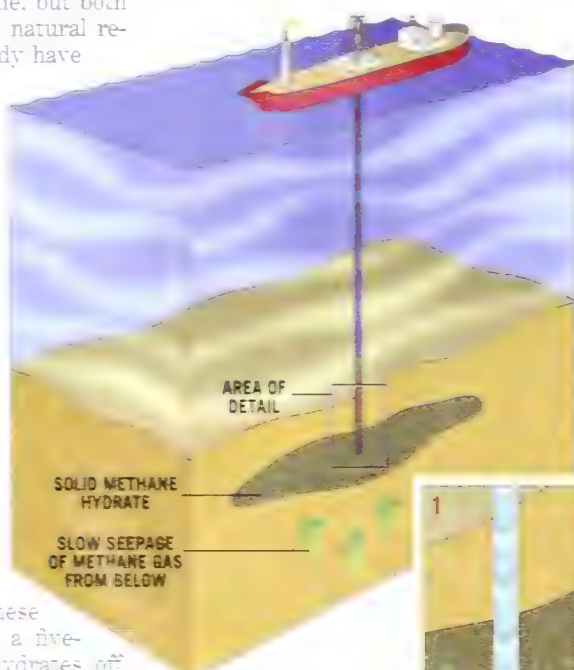
Long before the controversy is resolved, Americans will probably begin drilling for hydrates in the Gulf of Mexico, where oil companies already have huge operations. Chevron's Johnson is confident that engineers will prevail. "Ten years ago, deep ocean drilling was difficult and now it's commonplace," he says.

"There's a good chance that we'll see gas hydrates being used in the U.S. within the next 15 years." Assuming that oil prices eventually rise, Johnson's prediction will become more than a pipe dream.

By E. J. Low and N. Y.

TAPPING INTO GAS HYDRATES

From an oil rig off the east coast of Japan, engineers sink a well 1,500 feet beneath the ocean floor. The well penetrates a layer of methane hydrate frozen solid in mud.

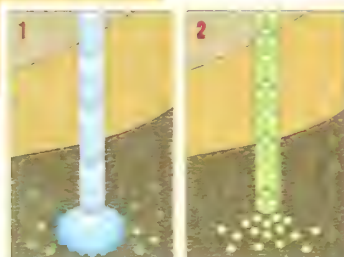


national gas-hydrate programs. In 1994, the Japanese National Oil Corp. set up a five-year project to drill for hydrates off the country's eastern shore. Even Washington is getting into the act. Last summer, the Senate cleared a bill to launch a national gas-hydrate study, and the House has passed a similar bill.

TRICKY HARVEST. The most difficult part of the gas-hydrate quest is not drilling, but harvesting the gas. Hydrates are made of water and methane molecules of methane are trapped. They are held in place by the water molecules. The problem is, the cost of recovering the gas is high. The drilling may be hard to justify at a time when prices of heating oil and gasoline are already low. The challenges will grow as the technology to mine and extract petroleum improves. Oil prices could languish or spiral downward for years, says John A. Kuuskraa, president of Advanced Resources International in Houston.

most concentrated deposits in the most permeable sediments can be mined economically.

There are two approaches to tapping gas hydrates. The simplest and cheapest is to attack hydrate pools that cap natural gas reservoirs. Engineers kill two birds with one stone: As they siphon off the natural gas below the ice layer, they ease the pressure on the hydrate and release methane from its cage of ice. The gas changes to liquid and can be sucked up through the pipe. That's the theory, anyway. But hydrates also have a devious tendency to revert to crystalline form, which



1 To melt the hydrate nodules and release the gas, rig workers pump steam and antifreeze into layers that extend hundreds of feet beneath the ocean floor.

2 Where the sediment is gravelly, the gas will then easily rise through the well.

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EDITED BY OTIS PORT

A GIANT STICK FOR MANKIND

A WEIRD, SOFTLY HUMMING object flew over Edwards Air Force Base in Southern California last month. It bore absolutely no resemblance to a flying saucer, though. It looked like a flying yardstick—a really big yardstick.

With a wingspan wider than a Boeing 747, the 206-foot Centurion flying wing has 14 battery-powered engines that will take it to the edge of space. In coming tests, the pilotless Centurion will climb to ever-loftier heights, perhaps reaching 100,000 feet, or 19 miles, by 2000. There, the robot plane will loaf along at 15 to 20 mph, conducting atmos-



WINGING IT: The Centurion is powered by 14 engines

pheric tests for NASA, with no exhaust fumes from jets to foul the results.

A next-generation model called Helios will be plastered with solar cells. They will

recharge the batteries so the plane can stay up indefinitely. The solar cells could also power other jobs, such as relaying telecom signals. AeroVironment Inc. in Monrovia, Calif., which built the Centurion for NASA, sees a bright future for robot planes doing such chores—at 10% the cost of a spacecraft.

Other companies sense the same opportunities. Aurora Flight Sciences in Manassas, Va., General Atomics Aeronautical Systems in San Diego, Calif., and Scaled Composites in Mojave, Calif., are also developing high-flying robots. And Japan's Posts & Telecommunications Ministry recently unveiled a scheme for a telecom network using dirigibles floating at 12-mile altitudes. □

SET PHASERS ON RAW PORK

STAR WARS TECHNOLOGY MAY SOON ZAP TINY bugs instead of incoming missiles. Two researchers at the University of Missouri-Columbia, Randy D. Curry and Thomas E. Clevenger, are developing a system that uses high-energy electron beams to disinfect food products. The E-beams kill *E. coli* and other nasty critters on food—even those hiding inside—by ionizing them.

The E-beam literally cooks them alive and disrupts the reproduction of any survivors. The killer ions vanish in seconds, so there's no harmful residue for people to

worry about, says Curry. Electronic pasteurization is just as effective as irradiation, a surefire sterilization technique widely used for foods in Europe and for medical devices in the U.S. But because electronic pasteurization doesn't need radioactive materials, special permits and licensing fees are not required.

The process is also faster, so Curry expects E-beam systems will be cheaper to operate. Until recently, electron accelerators were far too big for food-processing lines. Now, the Missouri duo is even testing the E-beam approach for purifying water.

Ellen Licking

YOU'RE TO BLAME FOR THE WEATHER

THE EVIDENCE OF HUMAN complicity in weather-borne disasters is growing harder to deny, says a study by the Worldwatch Institute and Munich Re, the world's largest reinsurer. The report links much of the damage of cataclysms in 1998—flooding of the Yangtze River in China and of the Ganges and Brahmaputra rivers in

Bangladesh, and Hurricane Mitch, among others—to population pressure, excessive logging, and other practices. All told, says Worldwatch, weather-related costs hit \$89 billion in 1998. That's 48% higher than in 1996—the worst single year on record—and greater than all weather-linked financial damages for all of the 1980s.

The study comes on the heels of a major warning from the National Center for Atmospheric Research, the University of North Caroli-

na, and Lawrence Livermore National Laboratory. It substantiates a critical human role in global warming. Comparing 115 years of temperature data with computer models on climate, the study, in the Nov. 27 issue of *Science*, concludes that volcanoes and other geologic phenomena have contributed relatively little to the observed warming trend. Variations in solar output may play a larger role. But greenhouse emissions emerge as the chief culprit.

Neil Gross

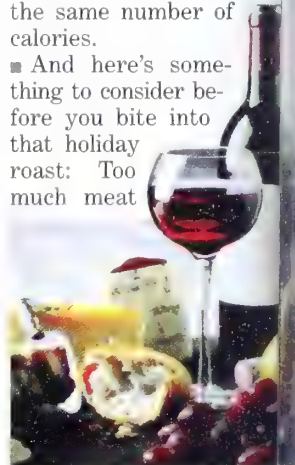
INNOVATIONS

Always on the lookout for your welfare, we offer here some studies to nurture your holiday cheer—and fears:

■ Alcohol in moderation is known to be good for the heart, but a study from Copenhagen's Institute of Preventive Medicine says the best kind is wine. Tracking 13,329 people for 16 years, the researchers found those who drank one to six glasses of wine per week had a 3% lower risk of stroke than teetotalers. Those who imbibed beer or spirits had no significant risk reduction.

■ But if you're worried about your waistline expanding during the holiday season, stay away from alcohol as much as you can. According to scientists from Purdue University, a glass of wine seems to produce more of a bulge than a slice of pie with the same number of calories.

■ And here's something to consider before you bite into that holiday roast: Too much meat



BE MERRY: A glass of vino a day may keep strokes away

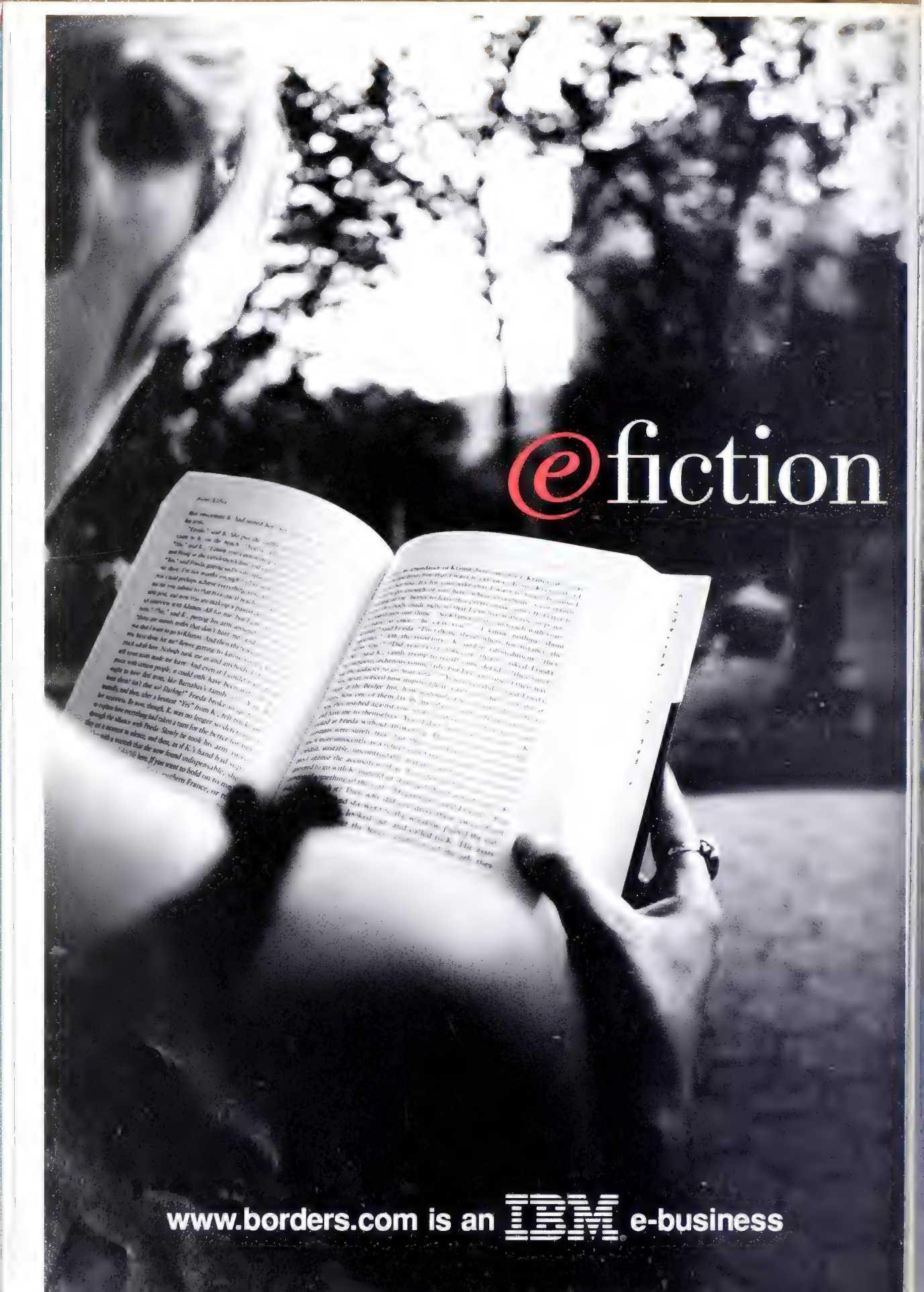
and dairy protein can cause the body to convert more calories into fat instead of burning them off normally. T. Ch Campbell, a biochemist at Cornell University, estimates that a meat-rich diet might bloat your weight 10 pounds a year, while just a little more veggies and the same number of calories wouldn't.

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwdec@businessweek.com

A black and white photograph of Spider-Man in his iconic suit, suspended in mid-air by a complex web he has just fired. He is positioned diagonally across the frame, with his right leg extended upwards and his left leg bent. His hands are outstretched, and he is looking towards the viewer. The background shows a cityscape with tall buildings under a cloudy sky.

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A black and white photograph of a person's hand holding a miniature Zamboni ice resurfacer. The toy vehicle is white with various NHL logos, including the Pittsburgh Penguins, New York Islanders, and a circular logo with the letter 'B'. A tiny figure of a person is seated in the driver's seat. The background is a blurred outdoor scene with trees and a path.

@zamboni.

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A black and white photograph of a man in a dark suit, white shirt, and dark tie, wearing dark sunglasses. He is standing behind a Vespa scooter, which is highly detailed with chrome. The scooter's front features a large round headlight, a smaller round horn, and two rectangular side mirrors. The Vespa logo is visible on the front grille. The man's right hand is resting on the handlebar area. The background is dark and out of focus.

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WHIRLPOOL: IN THE WRINGER

Caught in Brazil's recession but is staying put



Rows of bright white washing machines and refrigerators cram into the G. Aronson appliance store in São Paulo. A few shoppers seem interested in the Brastemp washers made by Whirlpool Corp.'s local subsidiary. But with Brazil's economy nosediving and annual finance rates topping 20%, low-income workers are in no position to buy anything on credit. José Antônio da Silva, a 37-year-old maintenance worker, has given up hopes of buying a new \$400 gas stove. "I'm afraid to pay over many months because you don't know if interest rates or inflation will rise again," he says. "It's risky and too expensive."

Whirlpool's Brazilian operations have been caught in a veritable spin cycle over the past year as the global financial crisis spread from Asia and Russia into Latin America. To protect against a run on its currency, the real Brazil doubled interest rates in October, 1997, and again this fall as they had gradually fallen back. As a result, Whirlpool's appliance sales in

Brazil plummeted by about 25% this year, to \$1 billion—or about 10% of the company's 1998 revenues, which analyst Nicholas P. Heymann of Prudential Securities pegs at \$10.3 billion.

Now Whirlpool, based in Benton Harbor, Mich., is battling to shore up Brazil—the jewel of its global expansion strategy—even while it has stumbled over expansion into Asia. The company has invested hundreds of millions of dollars to modernize and cut costs in Brazil and solidify its position as the market leader in refrigerators, room air-conditioners, and washers. The stakes are huge: Brazil is by

far Whirlpool's biggest emerging-market bet, and through much of the '90s, its most profitable foreign operation. Whirlpool's Brazilian affiliates contributed 1997 earnings of \$78 million, compared with a measly \$11 million operating profit for the parent. Says Chairman and Chief Executive Officer David R. Whitwam: "In Brazil, we've built a very commanding position in the market, and we'll see what kind of benefits that position can yield."

Things figure to get worse before they get better. Brazil is skidding into a recession that could shrink gross domestic product by 3% next year. As a result, 1999 will likely mark the third straight year appliance sales

and profits decline at Brasmotor, Whirlpool's local subsidiary. Prospects are so gloomy that it could be three years before sales return to 1996 levels.

That's quite a reversal. Sales at Brasmotor soared 28% from 1994 to 1995 and 15% more in 1996. When Whirlpool spent \$217 million last year to hike its stake in Brasmotor from 33% to 66%, it looked brilliant for having persevered through Brazil's idiosyncrasies.

TIRED TUNE. With recession now looming, though, Whirlpool's timing couldn't have been worse. Still, executives are confident they can ride out the storm—and in any case, they don't think they have any choice. Whitwam argues that growth in home appliances is most likely to come in emerging markets, thanks to the low penetration rates for appliances: Only 15% of Brazil's households own microwave ovens, for instance, compared with 91% in the U.S. Whitwam estimates that once Brazil recovers,

it should grow an average 5% to 6% a year, vs. just 1% to 2% in North America and Europe.

But Whitwam has been singing that tune for years, and Wall Street has grown tired of waiting for his ambitious—and costly—global expansion plans to pay off. Whirlpool's problems in Brazil are a big reason why its stock price has risen less than 4% since the start of the year, to about 55, compared with a 21% gain for the Standard & Poor's 500-stock index. Moreover, ana-

LIGHTER LOAD:
In the past year, Brazil CEO Periquito cut 3,500 jobs



WHIRLPOOL COOLS OFF IN BRAZIL





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The Corporation

ists say Whirlpool also is being punished for the poor execution of a broad global strategy that relies too much on heavy capital investment. The company last year had to restructure its China operations, dropping out of one joint venture after refrigerator capacity in that country doubled over 30 months and drove prices down sharply. Prudential's Heymann expects Whirlpool to lose 16 million in Asia this year—better than a \$62 million loss in 1997, but not the profit it had expected.

Competitors, meanwhile, have found better ways to expand. General Electric Co. pushed overseas with less costly licensing agreements and acquisitions. And Maytag Corp. is squeezing more money out of those "mature" markets, getting U.S. shoppers to pay more for its innovative Neptune front-loading washers. The result: Maytag will have margins next year of about 13%, Heymann says, compared with 7.5% for Whirlpool. "The companies that have stayed closer to the

renew plants and product lines. The company initiated a data-exchange system that links its computers with those of retailers to keep better track of stock—a rare level of connectedness for Brazil. And Brasmotor has launched a line of products with upgraded features, such as a microwave oven with a "crisp" setting to keep foods from getting soggy when reheated. Periquito, a Brazilian who came to Whirlpool in 1996 from Alcoa Inc., boasts that Whirlpool now can increase or decrease output by 50% in just 30 days. "We need that kind of flexibility and agility," he says.

No kidding. In Brazil's white-goods business, there's no such thing as "steady." Sales tend to either soar or crash. In 1994, demand for household appliances exploded after Brazil introduced an anti-inflation plan. Millions of low-income earners who had been waiting years to replace worn-out refrigerators and ranges rushed for stores. With price stability, a blue-collar worker could bud-

When Brazil tamed inflation in 1994, it became the darling of Whirlpool's global operations—until last year's currency jitters and tight money

U.S. and Canada, such as Maytag, have done well," says Donald Bishop, an analyst for Van Deventer & Hoch, a Glendale (Calif.) investment firm that holds 12,700 Whirlpool shares.

So far, though, Whirlpool continues to have an edge in Brazil. While profits have dwindled, it is the only major white-goods maker still making money here. Whirlpool reported \$63 million in local profits through the first nine months of 1998, whereas competitor Electrolux of Sweden lost \$13 million in Brazil. Whirlpool's advantage, which it lacks in Asia: 40 years of operating in Brazil have earned strong loyalty. Its Brastemp and Consul refrigerators have 30% of the market. "They have a great brand name that gives them a competitive advantage," says Eduardo de la Peña, an analyst with Brazilian investment bank Bozano Simonsen.

OLD HANDS. To keep that edge, Paulo Periquito, Whirlpool's executive vice-president for Latin America and CEO of its Brazilian operations, is attacking on several fronts. He has cut 3,500 jobs and links in the production chain to improve efficiency at its five plants in Brazil and one each in Argentina and Chile. But he's doing far more than just trimming costs. Whirlpool has invested \$280 million in the past two years to

get \$75 a month for a year to buy a washing machine.

But then Asian currencies came under attack from speculators last year, and it wasn't long before traders shifted attention to other shaky markets like Brazil. The government of President Fernando Henrique Cardoso twice boosted interest rates to keep money from fleeing the country. Brazil avoided falling into an abyss but wreaked havoc on consumer spending. Until Brazil can cut its fiscal deficit, it will need high rates to avoid a devaluation.

Periquito is pinning his hopes on interest rates falling gradually in 1999, a prospect many economists consider possible under the International Monetary Fund's \$42 billion bailout. The experience of surviving Brazil's many debt crises, bouts of hyperinflation, and military governments has given Whirlpool a been-there, done-that aura of confidence. But the current combination of declining growth and high interest rates is a particularly nasty mix. "If people aren't making money and interest rates are high, it's tough to force a demand for these products," Periquito admits. All he can do is get the company into shape for when the wild Brazilian roller-coaster starts to climb again.

By Ian Katz in São Paulo



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LANDS' END TACKLES AGAIN

Can the cataloger's fourth CEO in six years stop the drift?

It took just nine months for former Lands' End Chief Executive Michael J. Smith's relations with Chairman Gary C. Comer to go from superb to sour: After leading the Dodgeville (Wis.) cataloger to record operating earnings of \$99 million for the fiscal year that ended January, 1998, Smith this year let inventories balloon and put out a spring collection that his own merchandising chief conceded was "garish." By Oct. 28, expectations for a merry Christmas were disappearing. With Lands' End Inc.'s third-quarter operating income down 45%, to \$9.2 million, and shares at \$15, from a February high of \$43, Comer unceremoniously pushed out his one-time protégé.

Problem solved? Hardly. Smith is the third CEO in five years to hit rough waters at Lands' End—and the second to get the heave-ho from Comer. The company's 70-year-old founder remains Lands' End's largest shareholder, with 57% of the company. Add to that a board peppered with insiders that appears to be dominated by Comer, and some investors and industry observers question whether the company's real problem resides in the chairman's office rather than the CEO's. "Three presidents in five years. We think it's the mark of mismanagement on the part of the major shareholder," says catalog consultant Maxwell Scroge.

INSULAR CULTURE. Neither Comer nor David F. Dyer, Smith's replacement as CEO, agreed to be interviewed for this article. But interviews with investors, analysts, headhunters, and six former executives and directors show rising concern that Lands' End is not being managed well. There is worry, too, that the insular culture Comer has created—exemplified by the tightly knit board and a reti-



cence to hire outsiders—may have to change for Lands' End to regain its leadership position. "Gary Comer has made that culture what he wants it to be," says Todd C. Ahlsten, director of research for Parnassus Investments. "But that culture is hard to maintain as you grow."

It's all quite jarring, since it was Comer who built Lands' End into a household name. Starting from a catalog he founded in 1963 for sailing enthusiasts, Comer created a hot preppie-apparel brand by the 1980s. Its stock soared as sales grew 27% a year in the late '80s.

But recent returns have been far from steady. The big culprit is Lands' End's core clothing catalog. While the \$87 billion catalog industry has jumped 8% annually over the past five years, Lands' End's core catalog, which provides more than half of its \$1.1 billion in sales, has eked out a mere 2% annual increase. Earnings, too, have seesawed wildly from year to year. For the 1999 fiscal year—which will end in January—operating income is expected to decline 20%, to \$79 million.

SELLING SHARES. So it's no surprise that Wall Street has become restless. Large investors, including Investor Capital Management Inc. and National Life Insurance Co., have pared down or sold off

IRON GRIP

Chairman Comer (top) unilaterally chose Dyer (bottom) without help from search firms or his own board

entirely large Lands' End investments in recent months. And for those that remain, leadership is the key to any possible turnaround. "We're very interested in who's at the helm," says Scott T. Brayman, fund manager for Centennial Fund, which recently sold almost half of its 200,000 shares.

That has been a key question since the early 1990s, when competition in cataloging heated up. According to the company, Comer realized the need for more modern management and gave up the CEO's job in early 1990. Together he and Richard C. Anderson, a longtime lieutenant who succeeded him as chief executive, worked to find managers who would take the company to a new level. In early 1991, the pair hired William T. End from rival L.L. Bean Inc. to work with Dyer, a former star of Florida-based chain Burdine's Inc. who became Lands' End's merchandising chief. End became CEO in January, 1992.

With the blessing of Comer and the board, the pair set off on an aggressive growth plan. To reach new customers,



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they bought and developed high-end catalogs such as The Territory Ahead, which sells expensive casual wear. They also acquired a line of specialized expedition gear called MontBell. The moves spurred growth—sales jumped 14%, to \$992 million for the fiscal year that ended January, 1995, the second year of End's tenure.

But expenses rose even faster, and operating earnings fell 10%, to \$63 million, as margins slid from 8.1% to 6.4%.

HOMEGROWN. Three former executives and analysts say the slide vexed Comer, and before the year was even over, he had had enough of the outsiders' efforts to rev up the company. Complaining that Lands' End was trying to do too much, Comer forced out End in December, 1994, and replaced him with Smith. He couldn't have made a more homegrown choice: The then-34-year-old executive had spent his entire career at Lands' End. Comer, with the board's support, instructed Smith to undo many

of End's moves and refocus on customer service, quality, and the core catalog. "Comer wanted to get back to Lands' End's old culture," says analyst Kevin E. Silverman of ABN AMRO.

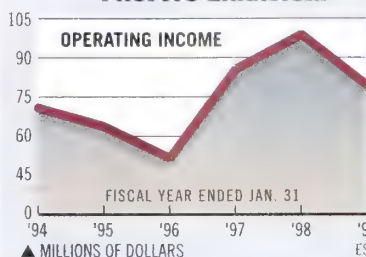
But when Smith's troubles began to surface this year, says a source close to the board, Comer began to discuss the

which specializes in placing retail executives. Nor did the board appoint its own subcommittee to conduct a search according to a source close to the board. Instead, Comer unilaterally made the decision to bring back David Dyer. "It is governance by fiat," says Patrick S. McGurn, director of corporate program at proxy adviser Institutional Shareholder Services.

"ONE GUY." That the board quickly approved Comer's choice doesn't surprise investors and corporate-governance experts, who call the Lands' End board one of the most insular in Corporate America. The eight members include close advisers to Comer such as his attorney,

Howard G. Krane; his longtime personal-investment adviser, John N. Latte; Richard Anderson, who replaced Comer as the company's second CEO; and David B. Heller, an investment banker who advised Comer on the company's 1988 initial public offering. More recent additions are the CEO and the vice-chair

REVOLVING CEOs HAVE LEFT PROFITS ERRATIC...



...AND HURT LANDS' END STOCK



DATA: BLOOMBERG FINANCIAL MARKETS, ABN AMRO

need for another change with directors. Having seen the chairman handpick two failed CEOs in the course of four years, many companies might have turned to an outside headhunter for help. Not Lands' End. "They've never hired a search firm," says Harold D. Reiter, president of Herbert Mines Associates,

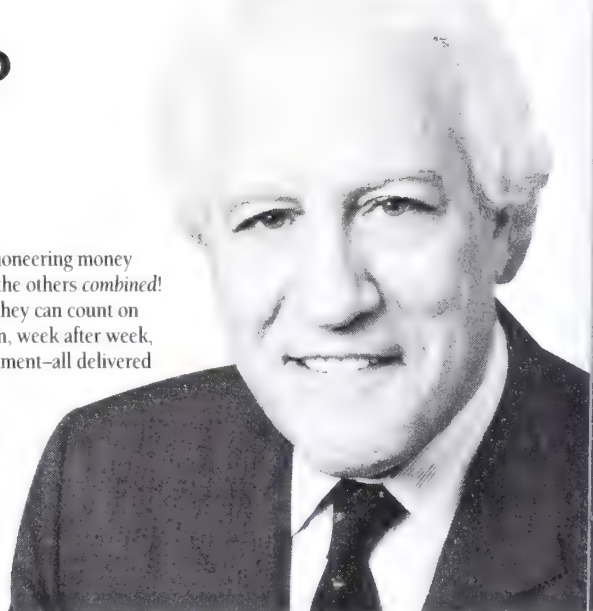
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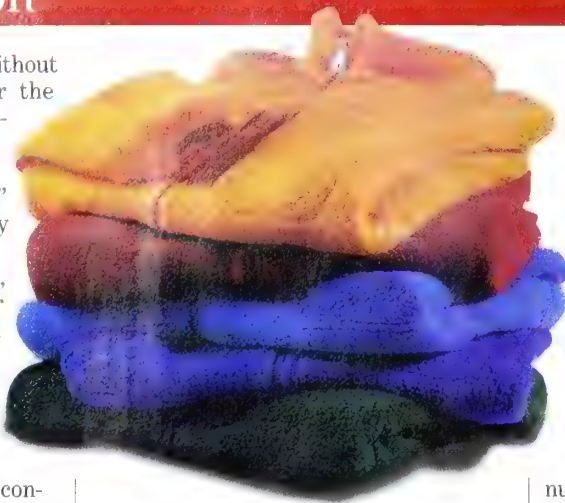
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The Corporation

man of sales. The only member without a direct connection to Comer or the company is Daniel Okrent, new media editor for Time Life Inc., who became a director last October. "The board is basically one guy," says Silverman of ABN Amro: "Gary Comer."

CROWDED FIELD. In many ways, Dyer was an unusual choice for Comer to make. He helped put in place the failed expansion strategy of the mid-1990s, though he left before the disastrous Christmas of 1994 to become head of merchandising at Home Shopping Network Inc. He later became a consultant, helping J. Crew Group Inc. ready its Popular Merchandise Club catalog for sale. But an attempt to get investor David Bonderman's Texas Pacific Group to back his own catalog venture failed, according to industry insiders. Although a good merchant, Dyer isn't the first person recruiters would think of for "a top CEO slot," says consultant Seroge.

Will Dyer do any better than his predecessors? He faces growing competition from new department-store catalogs such as Macy's, Internet shopping, and



retailers such as Gap and Banana Republic. Lands' End also has an estimated \$100 million in excess year-old inventory on its books and \$257 million in short-term borrowings taken primarily to carry that and other inventory. Although hastily printed sale catalogs are expected to arrive in mailboxes before Christmas, a multimillion-dollar write-off in January looks likely. "It's in Dyer's interest to start with a clean slate," says Brayman.

Dyer has promised to pare down the

Faced with some \$100 million in year-old inventory, it's unlikely that Dyer will be able to avoid a multimillion-dollar write-off in January

number of items Lands' End sells but has yet to say much about his growth plans. Some investors are hopeful that his background at HSN will help bolster the company's already strong Internet sales. Parnassus' Ahlsten has started buying shares on the belief that electronic commerce will overcome the company's problems. In recent days, the stock has edged up to 22 on hopes of a good Internet Christmas. "Dyer has to do something fast; Gary is counting on it," Ahlsten says. And pleasing Gary Comer appears to be the new CEO's No. 1 job.

By De'Ann Weimer in Chicago

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TELEVISION

WHAT ABC NEEDS IS HOME IMPROVEMENT

Bob Iger is battling to reverse the network's slide

It is not unusual for Michael D. Eisner, Walt Disney Co.'s hard-driving CEO, to work late at his Bel Air (Calif.) home, firing off E-mail to lieutenants. What surprises Eisner, though, is how often he gets E-mail back from Robert A. Iger, president of ABC Inc., in New York within half an hour—even when Eisner's missive is sent at 4:30 a.m. Eastern time. "He gets in to the office earlier and works later than anyone else I know," says Eisner.

But these days, being the hardest-working man in showbiz can get you only so far. Against the backdrop of the sagging network-TV business (page 104), ABC is mired in a ratings slump: In the crucial November sweeps, it again placed

No. 3, trailing NBC and CBS. ABC's \$9.2 billion gamble on National Football League rights is off to a shaky start. And the network's woes, alongside concerns about slowing growth at cable sports network ESPN, helped prompt analysts in September to downgrade Disney stock. "Bob's very polished, and he's very adroit, but he's in a difficult position right now," says a former ABC executive. "He doesn't have much to beat his chest about."

READY TO REBOUND. Certainly some parts of ABC are doing well, including ESPN and ABC's 10 TV stations and 30 radio outlets (The McGraw-Hill Companies, BUSINESS WEEK's parent, owns four ABC-affiliated TV stations). But in the fourth

ROBERT IGER

BORN 1951, New York City.

EDUCATION BS, 1973, Ithaca College, magna cum laude, communications.

FIRST JOB TV weatherman, Ithaca, N.Y.

POSSIBLE NEXT JOB No. 2 at Disney and successor to CEO Michael Eisner.

BIGGEST IMPEDIMENT TO NEXT JOB Needs to fix the ABC television network amid sliding ratings, rising programming costs, and labor strife.

HIS STRATEGY FOR ABC Buy more TV stations and cable-TV channels to add to expanding roster of ESPN and Disney Channels at home and abroad. Extend the ESPN brand name through ESPN Zone restaurants and *ESPN Magazine*. Sits on the board of Disney's 43%-owned Infoseek and sees "huge potential" online.

FAMILY Married to broadcaster Willow Bay; infant son, Robert Maxwell; daughters Kate and Amanda from a previous marriage.

INTERESTS Works out at 5 a.m. Spends two to three hours a day on the Internet. Collects wine and rare books.

quarter ended Sept. 30, operating income for all of Iger's domain dropped 18% from last year, to \$197 million. The main culprit: the network, which accounts for half of ABC's revenues. From generating operating profits of more than \$400 million several years ago, the network will lose \$325 million over the next two years, estimates Jill Krutick of Salomon Smith Barney (table, page 102).

Iger has spent much of the past three years trying to get his own management to gel while handling the complex task of merging ABC into Disney. That process is complete, and he insists that a rebound isn't far off. "Until you get the right combination of people, it's very difficult to succeed," says Iger. "We now have that."

Eisner felt the same way in 1991 when Disney acquired ABC for an eye-popping \$19 billion. His first move was to make sure Iger, a 21-year ABC veteran, stayed on to run the division that accounts for just under one-third of Disney's \$23 billion in revenues. The two men go back nearly a decade, when Iger was running ABC Entertainment in Los Angeles and Eisner was selling his shows. For most of Iger's term, ABC led prime-time ratings. "He helped bring ABC to the top once before," says Eisner, "and he has the talent to do it again."

Iger also has one of the most envied

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able groupings of assets in the media business: a network, TV stations, cable channels, and a direct pipeline into one of the world's biggest studios. He even has a strong Internet play through the espn.com and abc.com Web sites, as well as Disney's 43% stake in Infoseek Corp., a portal. "They have all the right assets," says Merrill Lynch & Co.'s Jessica Reif Cohen. "Sooner or later, they will turn it around. It's a question of getting the right programming."

That may be asking a lot in the current climate. Having failed to deliver the promised audiences, ABC has had to compensate advertisers with extra airtime—and it expects to fall short again next year. *Monday Night Football* ratings have dropped 10%, and a ratings meltdown persists at once-mighty *Good Morning America*. Patricia Fili-Krushel, whom Iger recently elevated to ABC Network president from head of daytime programming, calls this a "rebuilding year" and points to relatively successful shows such as *The Practice*, *Dharma and Greg*, and *Sports Night*.

Meanwhile, as he prays for more hits, Iger has been hammering away at costs, including imposing a hiring and salary freeze. At ABC News, President David L. Westin says that in the past two years he and Iger have lopped more than 10% off a budget that now stands at \$550 million. Further cuts could come if a deal is worked out between ABC and Time Warner Inc.'s CNN. The companies have had preliminary talks about pooling overseas news bureaus and other resources, but CNN is talking to other networks as well.

ON-AIR FLUBS. In his cost-slashing zeal, Iger has also gone to war with the National Association of Broadcast Employees & Technicians (NABET). ABC has been without a contract with the union since March, 1997, and more than 2,000 NABET employees have been locked out in five cities since Nov. 3. This has forced some ABC executives to operate cameras, caused a few on-air flubs, and prompted several top Democrats, including Vice-

President Al Gore, to cancel interviews with ABC News crews. Analyst Tom Wolzien at Sanford Bernstein & Co. says Iger wants a contract that will give his operation parity with rivals. "They've got a lot more to cut to be on the same footing as NBC," says Wolzien.

Iger's challenge is to balance cost-cutting with growth, while generating some of the vaunted Disney synergy. So far, that synergy has worked best in children's programming, where Disney has taken over ABC's Saturday morning programming

news channel and stalled plans for soap-opera channel—is said to be one reason why the respected Geraldine Laibson quit earlier this year as Iger's cable chief.

CUSHION. One area where Iger dare not stop spending is at 80%-owned powerhouse ESPN, whose chief, Steven L. Bornstein, continues to build the ESPN channel and has also launched ESPN Classic Sports Network, *ESPN Magazine*, and

MONEYMAKER: ESPN is raking it in for ABC



| | ESTIMATED OPERATING INCOME IN MILLIONS OF DOLLARS | | | |
|---------------------|---|-------|--------|--------|
| | 1997 | 1998 | 1999 | 2000 |
| ABC NETWORK | \$175 | \$100 | -\$150 | -\$175 |
| TV STATIONS | 460 | 500 | 545 | 583 |
| RADIO STATIONS | 145 | 150 | 153 | 158 |
| ESPN1 | 545 | 600 | 660 | 719 |
| INT'L AND STARTUPS* | -40 | -25 | -26 | -44 |
| TOTAL | 1,285 | 1,325 | 1,182 | 1,241 |

*Includes ESPN2, Disney Channel, Classic Sports Network, and Toon Disney

DATA: SALOMON SMITH BARNEY INC.

and replays some shows later on the Disney Channel. The benefits of owning content and distribution have been less apparent in ABC's core adult market: The network carries only 1.5 hours a week of Disney-produced adult programming in prime time, down from 3.5 hours last year and 3 hours before the merger. "They certainly haven't come up with any magic there," says a competitor.

In addition to milking his Disney ties, Iger says he also wants to expand. On his wish list are more TV stations and subscription-based channels, à la ABC's 37.5% stake in Arts & Entertainment Network and 50% of Lifetime Television. But Iger's reluctance to fund new-channel launches—it shelved plans for a 24-hour

even recently opened its first ESPN Zone restaurant. So far, Bornstein has fended off competition from Fox/Liberty Network's expanding group of regional sports networks, but competition is heating up between the networks and sports news.

Up till now, the strength of ESPN and ABC's TV stations has been Iger's cushion, together pumping out more than \$1 billion in annual income. The question now is whether ESPN can maintain its heady growth and whether the network troubles can be contained. For Iger, 47, the stakes are high. After two years of jetting to Burbank, Calif., for Eisner's Monday state lunches, he intends to move to the West Coast by 2000. It's a move that has fueled much Times Square speculation. One theory is that Eisner wants to micromanage ABC himself. Another is that if Iger can

reverse the network's slide, the now-vacant Disney presidency—and a shot at eventually succeeding Eisner—could fall to Iger.

Other people, of course, have been suggested as a prospective No. 2 for Eisner, including Disney studio chief Joe Roth. Eisner diplomatically calls Iger "one of several senior managers here the board would be comfortable with in that position." Iger admits only that "there's ambition on my part to finish out my career at the company I started at." To be known as the man who turned ABC around would certainly be one way to assure that.

By Richard Siklos in New York, with Ronald Grover in Los Angeles

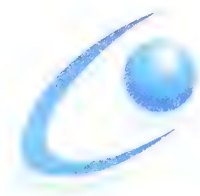


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TELEVISION

MUST-SEE TV FOR LEFT-HANDED MEN UNDER 30

ABC, CBS, and NBC are increasingly watched by niche viewers

Two years back, *Jag* was a ratings dud for NBC.

Today, the slick military drama is a hit on CBS, ranking among Nielsen Media Research Inc.'s top 20 and battling with ABC's *Home Improvement* for the Tuesday-night ratings crown. Why the turnaround? Perhaps it's because *Home Improvement* is getting long in the tooth. But more important, *Jag* never caught on with the upscale NBC viewer, who tends to live in a big city and on average is 40 years old. The show struck a chord with CBS viewers, though, who are mostly older and more rural. Indeed, fully 60% of current *Jag* watchers are over 50, but only 30% of viewers were that old when the show aired on the Peacock Network.

Jag is only one example of a prime-time trend that's giving some network execs ulcers. As fewer people tune in to network TV, the networks may soon resemble their archrivals, the cable channels. Although they still chase large blocks of viewers, networks are finding that their programs are increasingly being watched by smaller, more finely targeted audiences. In short, they're becoming narrowcasters. And that's heresy to traditional TV network orthodoxy, which holds that the "broad" in broadcasting means leading the largest number of viewers to their advertisers.

SERIOUS FRACTURE. "It's the radio-ization of broadcast network television," says Jamie Kellner, president of the WB Television Network. "Just like on a radio dial, eventually all networks will get about 10% of the audience. To survive, they'll have to cater more to teens, oldies, women, men, whatever."

Already, the networks are taking on distinct demographic identities. At CBS, 54% of its prime-time viewers are over 50, up from just 50% in 1995, according to Nielsen. And at NBC, considered the



**Just as in radio,
"eventually all [TV]
networks will get about
10% of the audience"**

yuppie channel, 31% of the viewers are between 35 and 49, up from 28% three years ago. ABC's audience closely resembles NBC's but includes more families in smaller markets.

With the dawn of digital TV, audiences will fracture further. And where there were three broadcast networks 15 years ago, there are six today. "It's a problem for networks," says Aaron Cohen, director of national broadcasting at New York media buyer Horizon Me-

dia Inc. "Advertisers want programs that appeal to the largest numbers of people, but other than ER, there just aren't shows that will do that."

WB, one of the new networks, never even pretended to be casting broad for an audience when it started four years ago. It deliberately set out to establish a specific brand identity among women under 30. And indeed, they're flocking to such hits as *Dawson's Creek* and *Felicity*, pushing the network's ratings up by 14% this year. That's fetching WB premiums of as much as 20% more than its regular ad rates, say its execs.

"WITH ATTITUDE." It's

wonder more established players are rethinking the program mix. At Fox Network, a sudden bulk of over-35 viewers has brass worried that Fox is losing its younger, edgier franchise. "We want to go

back to programming with attitude," says David Hill, chairman of Fox Broadcasting Co.

Hill has brought in as his top programmer Doug Herzog, 39, who, when he was president of Comedy Central, introduced the cable hit *South Park*. For NBC, which boasts the highest position of any network of viewers earning \$75,000 or more

a year, the strategy is to win back the upscale, thirty- and fortysomething viewers who defected to cable—resulting in a 16% ratings plunge this year. NBC recently hired Turner Broadcasting System Inc. cable programmer Scott Sassa, 39, to be president of NBC Entertainment.

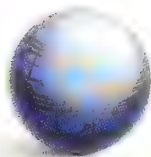
Other broadcasters resist the narrowing focus at their peril. "The problem begins when you start to ignore your core audience," warns Fox's Hill. So CBS discovered two years ago, when it aired *Step by Step* and *Family Matters*, shows that had been on ABC and appealed to a younger set. Within a year, both failed on the older-viewer network. This year, newcomer UPN saw its ratings fall 39% when shows such as the new *Love Boat* failed to grab UPN's urban and heavily African American audience. Sobered by such debacles, Fox's Hill, for one, wants his network again to be known as the place to go for lowbrow entertainment. It may not win him any Emmys, but the reward will come if it stops American viewers from clicking past.

By Ronald Grover in Los Angeles



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When giant retailer Wal-Mart Stores Inc. sued upstart Internet bookseller Amazon.com Inc. on Oct. 16, jaws dropped. Wal-Mart accused Amazon of raiding its executives to steal its computerized merchandising and distribution trade secrets. The amazing part: Wal-Mart said tiny, money-losing Amazon had caused it "economic damage" and continues to do so. Amazon Chief Executive Jeffrey P. Bezos isn't talking about the suit—except for this calculation: "Even if all our employees came from Wal-Mart, it would be less than two-tenths of 1% of their workforce," he says—and then bursts into a raucous laugh.

Clearly, Wal-Mart isn't laughing. And Bezos? He didn't hee-haw long. He promptly bought three books—from Amazon, of course—on the subject of Wal-Mart to learn more about how the company works. What he found: Comments from Wal-Mart founder Sam Walton saying he trolled rivals for talent—which were then used in Amazon's court filings. Legal experts say it's a long shot for Wal-Mart to win, even though Amazon has hired several Wal-Mart executives, including one who is now Amazon's chief information officer overseeing the company's crucial technology operations.

Regardless of the outcome, this case may well signal a watershed in the history of the Internet: the moment when cyberspace retailers began to turn the tables on earthly ones. Indeed, Amazon is blazing a trail in the world of commerce where no merchant has gone before. By pioneering—and darn near perfecting—the art of selling online, it is forcing the titans of retail to scramble onto the Net. More than that, it's jolting them into rethinking whether their traditional ad-

vantages—physical size, mass-media branding, and even the sensory appeal of shopping in stores—will be enough to thrive in the New Economy. Says Duke University marketing professor Martha Rogers: "Amazon is an example of how an upstart can redefine its whole industry."

Consider this: Amazon offers an easily searchable trove of 3.1 million titles—15 times more than any bookstore on the planet and without the costly overhead of multimillion-dollar buildings and scads of store clerks. That paves the way for each of its 1,600 employees to generate, on average, \$375,000 in annual revenues—more than triple that of No. 1 bricks-and-mortar book seller Barnes & Noble Inc.'s 27,000 employees.

Amazon's cutting-edge technology gives it a leg up, too, by automatically analyzing past purchases to make recommendations customized to each buyer—a trick that confounds 20th century mass

Cover Story

amazon.com

THE WILD WORLD OF

marketing. And with a single mouse click, an order can be placed on its Web site, making shopping a friendly, frictionless, even fun experience that can take less time than finding parking space at the mall.

Now, Amazon is extending its warm and fuzzy formula far beyond the bibliophile set. On Nov. 17, the online merchant debuted a video store, as well as an expanded gift shop—the clearest sign yet that Bezos aims to make Amazon the Net's premier shopping destination. Buyers who visit the Web site can now find everything from Pictionary games and Holiday Barbies to Sony Walkman



A photograph of Jeff Bezos lying on a bed with a patterned blue and white coverlet. He is wearing a blue button-down shirt and light-colored trousers. He is smiling and looking towards a small, light-colored dog named Kamala, which is sitting on his chest. The dog is looking back at him. The background is a soft-focus view of the bed and the dog.

*king of the jungle
Bezos relaxes
with his
dog, Kamala*

-COMMERCE

y pioneering—and damn
near perfecting—the art
f selling online, Amazon
s redefining retailing

and watches. And Amazon isn't apt to stop there. Not surprisingly, Bezos, who abruptly left a cushy job as a Wall Street hedge-fund manager in 1994 to race across the country and launch Amazon in his Seattle garage, is keeping his plans close to the vest. But experts say he's eyeing everything from software and apparel to flowers and travel packages—markets that could pit the upstart against more heavyweights, such as Microsoft Corp. and Nordstrom Inc., as early as next year.

Can Bezos, a 34-year-old computer whiz with no previous experience in retail, pull it off? Don't bet against him: In Amazon's first full quarter selling music CDs, ending last September, it drew \$14.4 million in sales, quickly edging out two-year-old cyberleader CDnow Inc. Says analyst Lauren Cooks Levitan of BancBoston Robertson Stephens: "When you think of Web shopping, you think of Amazon first."

Indeed, in nearly the blink of a cursor, Amazon has blossomed into cyberspace's biggest consumer merchant, with 4.5 million customers and an expected \$540 million in sales this year, up from \$148 million last year. No wonder investors are gaga. Even after an Internet stock sell-off on Nov. 30, Amazon's stock is trading at about 209 a share, 23 times its May, 1997, initial public offering price of \$9 a share, post-split. That's a market value of—hold on to your seat—\$11.1 billion, or five times higher than Barnes & Noble's. All for a company that's losing more millions every year and isn't expected to turn a profit until at least 2001.

Call these investors nuts, but their underlying assumption is dead-on: The potential for E-commerce, and Amazon in particular, is as vast as cyberspace. More people keep swarming online—nearly 100 million worldwide now, swelling to some 320 million by 2002, predicts market researcher International Data Corp. A new Visa USA Inc. survey of some 1,000 Internet users found that nearly half plan to shop on the Web this fall alone. All told, cybershoppers are expected to spend \$7.8 billion this year, jumping to \$108 billion by 2003, or 6% of all U.S. retail spending, says Forrester Research Inc.

Yet for all of Amazon's success, there is much debate as to just how much of that the company will pocket. In books, Bezos chose a clear winner: a market that had no big online rivals and no dominant traditional players—even No. 1 Barnes & Noble has only about 11% of the U.S. market. But as Amazon plunges into each new category, it no longer has that crucial first-mover advantage. Instead, it faces entrenched and often much bigger rivals in virtually every corner it may choose to enter. That's what led Forrester CEO George F. Colony to declare last year that the pioneer online merchant soon would be "Amazon.toast."

Amazon can't even dismiss the booksellers, who, despite their lumbering start, are making a mad dash for the Net now. Last month, Bertelsmann, the German media giant and owner of several publishers, including top Random House Inc., paid \$200 million for a 50% stake in the online arm of Barnes & Noble, giving it a considerable war chest for its battle with Amazon. And on Nov. 6, Barnes & Noble jolted Amazon and the entire publishing world by announcing a \$600 million deal to buy the leading book distributor Ingram Book Group—which supplies 60% of Amazon's books. Barnes & Noble promises no favoritism, but prudence will force Amazon to find other sources, likely at higher cost. A that adds up to a fearsome force in Amazon's core market. Says Barnes & Noble Vice-Chairman Stephen Riggio: "The biggest piece of the market is ahead of us."



wild in the aisles Amazon's employees don't fit the corporate mold. "We tell the temp agencies, 'Send us your freaks,'" says a customer-service exec

CYBERMALL. The seasoned online crowd is no less determined to fight off Amazon. On Nov. 23, CDnow—which has announced a deal to merge with rival N2—nearly doubling its sales—joined with movie seller Reel.com, computer merchant Cyberian Outpost, eToys, and others to form a virtual mall called Shoppe Connection. Buyers can access each of those online retailers from a single site. Likewise, Web portals such as Yahoo! Inc. and the bulked-up America Online Inc.—Netscape Communications Corp. combo are angling for a bigger slice of the E-commerce pie. So are fast-growing merchants such as Buy.com (page 13).

And as Bezos moves into new markets, he will run smack into traditional retailers that are starting to wield their brands online. A new study by Boston Consulting Group

found that 59% of consumer E-commerce revenues—including retail sites and online financial and travel services—are generated by companies such as Eddie Bauer and 1-800-FLOWERS that also sell through traditional channels. Says Call Sanger, a vice-president at Macy's parent Federated Department Stores Inc.: "We think the brand of Macy's is far more meaningful to the consumer who is looking for traditional department-store goods than any Internet brand name."

As if all the rivals aren't scary enough, Amazon faces an even more fundamental uncertainty: Retailing is a business with razor-thin margins, prompting some analysts to question whether the company will ever be profitable. The theory: Its ambitious growth plans will keep it on the fast track for entering new markets, propelling costs ever upward—ad earnings out of reach. Analysts estimate that Amazon will spend nearly \$200 million on marketing next year, up 50% over a year ago. "The company has been able to show it can sell lots of books for less without making money, and now it has shown it can sell lots of music for less without making money," says Merrill Lynch & Co. analyst Jonathan Cohen, one of only two analysts with a sell rating on the stock.

For every Cohen, though, there are seven analysts who

Cover Story

Amazon's Growing Universe

NOW

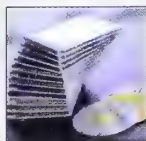
WHERE AMAZON HAS PLUNGED IN

BOOKS

OPPORTUNITY

Already the No. 1 online bookseller, with \$340 million worth of books sold in the first nine months of this year. That's big—but just a fraction of the \$82 billion that will be sold around the world in 1998.

MUSIC



Sales reached \$14.4 million in the first three months, outdistancing No. 1 online music seller CDnow. There's room to grow: Music sales amounted to \$38.1 billion worldwide last year.

VIDEOS

Opened shop this month. Video sales, a \$16 billion business worldwide, allow for potent cross-marketing with related books and CDs.

CHALLENGE

Profit margins are low, even online. Terra firma rivals, such as Barnes & Noble, are beefing up their online presence.

CDnow and N2K, which recently announced they would merge, are already a potent force. On top of that, CDs carry even lower profit margins than books.

Quick shipments require vast inventory. The shipping delay may keep some buyers in stores.

SOON

WHERE AMAZON IS TESTING THE WATERS

CONSUMER ELECTRONICS

OPPORTUNITY

It's a \$76 billion market for products such as hand-held game machines, digital cameras, and portable CD players, which have higher average selling prices than books, CDs, and videos.

GAMES

Gifts such as Pictionary and Scrabble are likely to appeal to book buyers, too.



TOYS

It's a sprawling, \$22.6 billion market that offers many tie-ins to books and videos—and it's a natural for quick gifts.

CHALLENGE

Sony Walkmen and walkie-talkies are not an obvious fit with books and CDs, discounting is rampant, and rapidly changing product models are tough to compare, even online.

Classics are easy to buy, especially for children's gifts, but buyers may take a pass on lesser-known games they can't see and touch.

Lack of established wholesale network means toys must be stocked. Dominant retailers, such as Toys 'R' Us, may lock up best terms.

FUTURE

WHERE AMAZON COULD DIVE NEXT

SOFTWARE

OPPORTUNITY

Amazon already sells some computer games, and the \$5 billion worldwide consumer market fits well with books and CDs.



HEALTH SUPPLIES

In talks to invest in startup Drugstore.com. Amazon could try to capture a small piece of the \$120 billion market for medicines and drugstore products.

APPAREL

A \$14.3 billion market by mail-order catalog, clothing sales are growing online. Amazon customers are comfortable buying without touching the merchandise.

FLOWERS

They're an easy sell for holidays and birthdays, and even a sliver of the \$15 billion in U.S. sales would be a huge boost in revenues.



MAGAZINE SUBSCRIPTIONS

A staple in physical bookstores, they're an easy and logical addition to books.

TRAVEL ARRANGEMENTS

Travel includes high-ticket items and the potential for higher margins, plus the ability to sell related books and videos.



CHALLENGE

Software requires lots of post-sale support, so linking with a partner may be more desirable.

Products are nearly ubiquitous in physical stores, and they're often purchased for immediate need.

This is a service-intensive business, and screen resolution can't match paper catalogs; probably best offered through a partner.

With floral networks and online providers such as 1-800-FLOWERS firmly established, this may be practical only through partnerships.

Must take on already established clearinghouses.

Requires scads of customer service, and online agencies are firmly established, so linking with a partner seems most likely.

DATA: INDUSTRY ASSOCIATIONS, RESEARCH GROUPS, BUSINESS WEEK

think Amazon ultimately will fulfill investors' seemingly outsized expectations. For one thing, it has an almost unheard-of two-year head start on key software that handles millions of transactions and personalizes the customers' experience. Amazon, for instance, was the first commerce site to use so-called collaborative-filtering technology, which analyzes a customer's purchases and suggests other books that people with similar purchase histories bought: the ultimate in targeted marketing (page 112).

Besides spurring more purchases, there's another huge bonus for Amazon: It can gather instant feedback on customer preferences to divine what else they might want to buy. Such valuable information has proven forbiddingly effective in capturing new markets online. While it may appear as though the company is careening willy-nilly into new terrain, Amazon is in fact targeting areas its customers have already requested. "We want Amazon.com to be the right store for you as an individual," says Bezos. "If we have 4.5 million customers, we should have 4.5 million stores."

Not since superstores and mail-order catalogers came along in the 1980s have merchants faced such a wrenching shift to a new way of doing business. It's a lot like what Wal-Mart did in the past decade: It used computers to transform the entire process of getting products to customers, all the way from the warehouse to Wal-Mart's welcome mats. Now Bezos is using Net technologies to shatter the perennial retail trade-off—he can offer a rich selection and personalized service, while still reaching millions of customers.

But technology is just one way Amazon is trying to rewrite the rules of retail. Bookstore and other retail chains largely depend on opening

new stores to boost revenues—a huge cost that Amazon completely avoids. In the reverse of traditional retailers, Amazon has relatively high initial costs for things such as computer systems and editorial staff—which partly explain its red ink today. But unlike retailers, who must continually invest in new stores to hike revenues, Amazon can boost sales by simply getting more people to come to its single online store. Says Chief Financial Officer Joy Covey: "I don't think we could have grown a physical store base four times in one year."

Of course, for now, Amazon has to spend millions on marketing to bring in new customers—about 24¢ per dollar of revenue last quarter, compared with 4¢ for traditional retailers. But it's little understood just how much leverage Amazon's low capital costs provide to support that spending. Here's how it works. Physical bookstores must stock up to 160 days' worth of inventory to provide the kind of in-store selection people want. Yet they must pay distributors and publishers 45 to 90 days after they buy the books—so on average, they carry the costs of those books for up to four months. Amazon, by contrast, carries only 15 days' worth of inven-

AMAZON'S AMAZING VALUATION

(Compared with some well-known companies)

| | MARKET VALUE*
IN BILLIONS | ANNUAL
REVENUES
ESTIMATES
IN BILLIONS |
|------------------------|------------------------------|--|
| AMAZON.COM | \$11.1 | \$542 |
| MATTEL | 10.1 | 5.2 |
| FEDERATED DEPT. STORES | 8.5 | 15.8 |
| DELTA AIR LINES | 7.9 | 14.6 |
| HERSHEY FOODS | 7.6 | 4.5 |
| KMART | 7.5 | 33.7 |
| HILTON HOTELS | 5.6 | 5.5 |
| TOYS 'R' US | 5.2 | 11.4 |
| MAYTAG | 4.9 | 4.2 |
| APPLE COMPUTER | 4.6 | 6.9 |
| CIRCUIT CITY | 3.7 | 9.3 |
| BARNES & NOBLE | 2.2 | 3.1 |

* Dec. 1 DATA: BLOOMBERG, ANALYSTS' ESTIMATES

tory and is paid immediately by credit card. So it gets about a month's use of interest-free money.

That float—amounting to well over \$5 million so far this year—actually provides a large chunk of the cash Amazon needs to cover its operating expenses. In its latest quarter, Amazon used a mere \$600,000 in operating cash while jacking up its customer base by 37%, or 1.4 million customers.

Even though Amazon is still a long way from making a profit, its basic economics suggest the upstart will someday look more like a fat-cat software company than a scrambling-for-profits retailer. Once Amazon gets enough customers and sales to pay off its initial marketing and technology investments—and as that technology pays off in falling labor costs—additional revenue drops to the bottom line. "Amazon's changing the business model of retailing," says Ann Winblad, a principal

at Hummer Winblad Venture Partners.

ALMOST ENDLESS. It's no accident that Bezos named Amazon after the river that carries the greatest volume of water. "He wants Amazon to be a \$10 billion [in revenues] company," says early investor and board member Tom A. Albrecht. To look at Amazon's crowded, grubby Seattle headquarters, you'd never suspect such grand ambitions: It's an unmarked building across from Wigland, the Holy Ghost Revival mission, and the Seattle-King County needle-exchange program. Unlike most of his Silicon Valley colleagues, Bezos is so cheap that the desks are made of doors and four-by-fours, while computer monitors sit on stacks of phone books. Of course, there's one big bonus: Everyone gets stock options, which have made dozens of Amazonians millionaires. But the usual Valley perks such as free neck massage? Yeah, right.

And it's only natural that in a company where everything is being created from whole cloth, the people don't exactly fit either the Silicon Valley or the Microsoft mold. Dogs, sometimes including Bezos' golden retriever, Kamala (named after a minor Star Trek character), and green-haired twentysomethings with multiple piercings run loose, often around the clock. Says Acting Customer Service Director Jane Slade: "We tell the temp agencies, 'Send us your freaks.'"

Bezos' executive staff is nearly as eclectic. It's a motley, though whip-smart, band of executives ranging from Microsoft refugees to liberal-arts majors and rock musicians. Ryan Sawyer, for instance, the vice-president for strategic growth, was a Rhodes scholar who studied poetry at Oxford. "They don't care what has been done in the

past," says Anne Martin, principal at BT Alex. Brown Inc., who was on Amazon's IPO road show.

And that includes Bezos. What he understood before most people was that the ability of the Web to connect almost anyone with almost any product meant that he could do things that couldn't be done in the physical world—such as sell 3 million books in a single store. Starting the company in his suburban Bellevue (Washington) garage, Bezos interviewed su-

Cover Story

STACKING UP THE AMAZON ADVANTAGE

| AMAZON | VS. | BARNES & NOBLE |
|-------------|--------------------------------|----------------|
| 1 WEB SITE | NUMBER OF STORES | 1,011 |
| 3.1 MILLION | TITLES PER SUPERSTORE | 175,000 |
| 2% | BOOK RETURNS | 30% |
| 306% | SALES GROWTH* | 10% |
| \$375,000 | SALES PER EMPLOYEE (ANNUAL) | \$100,000 |
| 24 | INVENTORY TURNOVERS PER YEAR | 3 |
| LOW | LONG-TERM CAPITAL REQUIREMENTS | HIGH |
| HIGH | CASH FLOW | LOW |

*latest quarter

DATA: COMPANIES, HUMMER WINBLAD, BUSINESS WEEK

A photograph of an igloo in a snowy, arctic environment. The igloo is built from ice blocks and has a small arched entrance. A blue ADT security sign is mounted on a pole in front of the igloo. The sky is a clear, pale blue.

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pliers and prospective employees at, ironically, a nearby café inside a Barnes & Noble superstore. Launching Amazon.com quietly in July, 1995, Bezos quickly set out to make the customer's experience as appealing as sipping a latté in a bookstore café.

Besides the huge selection and simple Web pages that load fast, he created a sense of online community. He invited people to post their

own reviews of books; some 800,000 are now up. He brought in authors for chats and more: John Updike started a short story, and 400,000 people sent in contributions to finish it.

Most important, Bezos made it irresistibly easy to buy a book. After the first purchase, a customer's shipping and credit-card information are stored securely, so the next time,

all it takes is a single click to send the books winging the way to a mailbox. And to assure people that their purchase went through, Amazon sent E-mail confirmations of orders which were often upgraded to priority shipping for free.

Rivals have since copied those tactics, but Amazon continues to give customers the red-carpet treatment. This month, it introduced GiftClick, which lets customers choose a gift and simply type in the recipient's E-mail address—Amazon takes care of the rest. The result: Some 64% of orders are from repeat customers, and that's rising steadily. For many, Amazon's a lifeline to literature. Marcia Ellis, an American attorney working in Hong Kong, used to drag home a suitcase full of books when she visited the U.S. Now, she orders two books a month online. "Most of the people we know here get books from Amazon," she says.

Bezos also was one of the first merchants to leverage the

Cover Story

'TECHNOLOGY, TECHNOLOGY, TECHNOLOGY'

Is Amazon.com Inc. a retailer or a technology company? CEO Jeff Bezos' answer: "Yes." And he's right—it's both. But it is technology that has rocketed Amazon to the top of the online-retailing crowd, and Bezos isn't coy about that: "In physical retail, the three most important things are location, location, location. At Amazon.com, the three most important things are technology, technology, technology."

Bezos aims to keep it that way. Some 75% of retailers still aren't on the Web, says Kip Wolin, business development director at retail Web consultant NetTech Group Inc. And the fast-changing nature of Net technology makes it tough to make up lost ground—giving early leaders a big edge.

HOMING IN. Indeed, Amazon was one of the first to take full advantage of the Net's computing power to let customers search easily for any book in print, read reams of reviews, and have purchases sent whizzing their way with a mouse click from the comfort of home—all things a bookstore can't do. Amazon also was the first commercial site to use "collaborative filtering" technologies to analyze customer purchases and suggest other books that people with similar purchase histories like.

In a bid to stay ahead, Amazon in August spent \$270 million to buy two key companies. Junglee Corp. develops comparison-shopping technologies that Bezos hopes will give

customers a way to find products Amazon doesn't sell directly. PlanetAll, a computerized Rolodex and Daytimer rolled into one, lets visitors register their phone numbers and other personal information and designate which friends—even members of an old Boy Scout troop—they want to keep in touch with. For

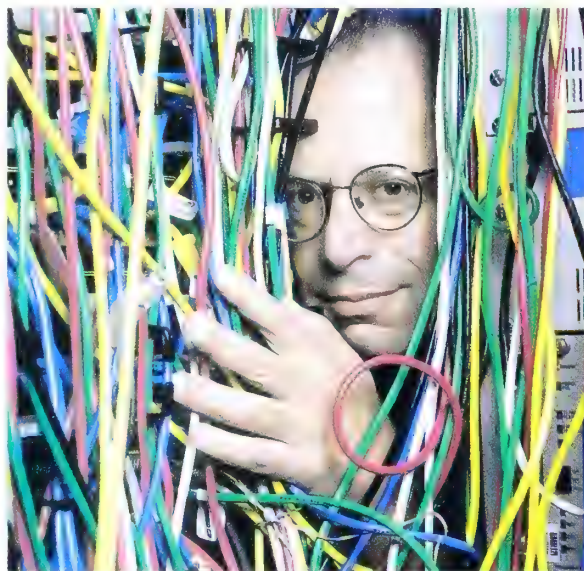
to take orders online, coordinate distribution, and handle huge volumes of E-mail. That has made it as much a software company as a retailer. Says Ann Winblad, a principal at high-tech venture capital firm Hummer Winblad Venture Partners: "Basically, these are information-systems companies, with a little pick, pack, and ship."

ALL-KNOWING? But the advantages of online retailing also make it more complex in some ways than traditional retailing. The biggest stores carry about 200,000 items. Amazon handles 3 million books, 24 hours a day, 7 days a week, says Chief Information Officer Richard L. Dalzell. Dalzell is testing a digital data storehouse for customer and product information, based on technology from Red Brick Systems Inc., that will be equal in size to more than 100 million novels. The goal: to amass enough detailed information about customers to allow Amazon to suggest precisely the products they're likely to want to buy.

Still, Amazon's technology isn't bulletproof. In January and September, the site went down for up to nine hours

because of a lack of adequate computer-backup systems. Although the company says it has addressed that problem, "it's always in scaffolding," admits Chief Technology Officer Shel Kaphan. For Amazon, it seems, technology will always be a work in progress.

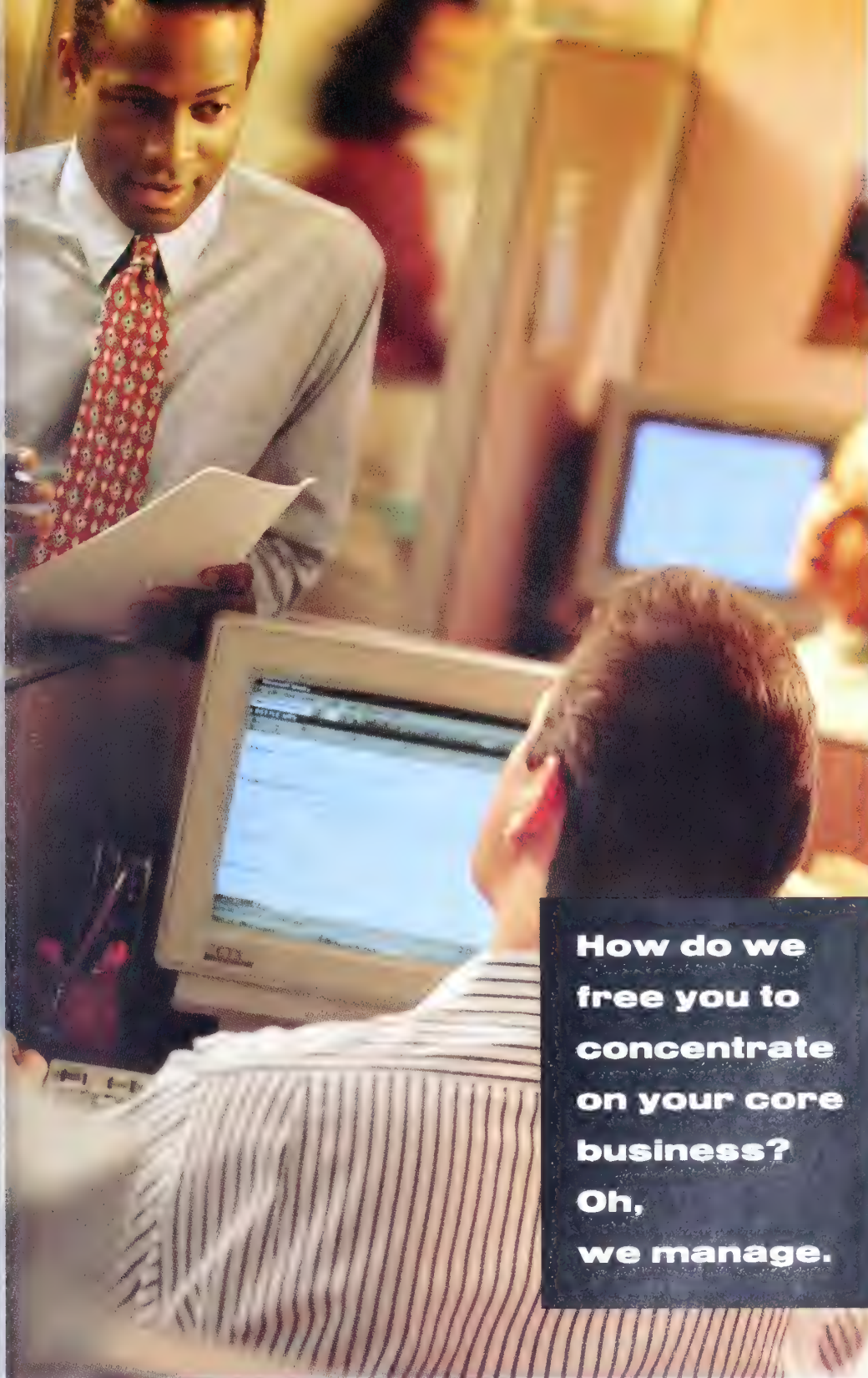
By Robert D. Hof in Seattle



not bulletproof The site went down twice this year. "It's always in scaffolding," says Chief Technology Officer Kaphan

Amazon, it's potentially a dandy reminder service to prompt other purchases. It could, say, send E-mails alerting people that Dad's birthday is coming up—and perhaps even suggest a gift based on his interests.

Because Amazon has been breaking new cyberground, it has had to develop most of its own technology



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concentrate
on your core
business?
Oh,
we manage.**

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Web's power in unique ways to spread the Amazon brand. Early on, he offered other Web sites the chance to sell books related to their visitors' interests through a link to Amazon. Their inducement: a cut of up to 15% of sales. Now, he has 140,000 sites in the so-called Associates Program.

That's what has kept even the online arm of Barnes & Noble at bay. Certainly the No. 1 bookseller, which built its first store 125 years ago, is a savvy merchant, but it proved vulnerable when it came to the ways of the Web. For one thing, it was late in arriving, and its store-trained executives took longer to learn the new rules of E-commerce than Amazon's Net-centric staff. "In the early days, there's a big advantage in not having that baggage," says William McKiernan, chairman of E-commerce services provider CyberSource Corp.

Even after Barnes & Noble went online, it was slower to take advantage of the Net's ability to customize its site to each shopper. That allowed Amazon to use its appealing customer experience as a branding tool far more powerful than conventional advertising. And Barnes & Noble? Despite its well-known name and huge online marketing campaign, only 37% of Internet users recognized the brand without prompting, vs. 50% that knew Amazon, according to IntelQuest Information Group.

The result: 18 months after Barnes & Noble went online, Amazon.com's \$153.6 million in third-quarter sales, up 306% from a year ago, still overwhelm the book giant's online sales by 11 times. And Barnes & Noble's online customer base rose 29%, to 930,000—still less than a quarter of Amazon's.

Still, the bottom line is that Amazon needs to get customers to buy more. Indeed, with the bruising price wars that are sure to come, getting each customer to spend a tad extra may be critical for survival. It's just that the next step—the first beyond entertainment media—is a doozy. For one thing, it's unclear that the Amazon brand will extend into, say, toys or consumer electronics. "I get the combination of books and music and videos," says Robert Kagle, a venture capitalist who invests in Internet startups for Benchmark Capital. "Beyond that, I don't know how far their brand goes."

Even if the brand does travel well, it's almost guaranteed that other products

won't be as profitable. Take CDs: They have lower margins than books. Same for videos. Toys have the disadvantage of not having as established a distribution network as books and music. So Amazon may have to stock more on its own, increasing its inventory costs and skimming off some of that nice float.

Already, established competitors are forcing it to do just that. Reel.com says 96% of the 20,000 titles it stocks are on the backlist. Those videos constitute most of its sales—and by far the most profitable portion. "If Amazon wants to ship them in a reasonable time, they'll have to stock them," says Reel.com CEO Julie Wainwright. And some products, such



inventory shift Reel.com CEO Wainwright notes: "If Amazon wants to ship [videos] in a reasonable time, they'll have to stock them"—which would cut into its lucrative float

as cars, real estate, or office products, are simply too cumbersome or expensive to ship. Or they may require too much aftersale support—which makes software a dicey product for Amazon to sell.

That's why Bezos will likely branch out beyond retail. In August, he spent \$270 million for two companies that steel Amazon even more firmly toward becoming a shopping service rather than just a retailer. One of them, Jungle, has technology that makes it easy to scour the Web for products and compare prices or other features. "We don't even necessarily have to be selling all those things," says Bezos. "We just help people find things that are being sold elsewhere on the Web." Amazon might take a cut of revenues from other retailers if its customers buy their products. Says marketing prof Rogers, who is a partner in consultancy Peppers & Rogers: "Their next mission is to be a service agent."

TENUOUS ADVANTAGE. It's a tricky mission. Why? It will be tough to guarantee that the entire customer experience will measure up to Amazon's standard. Any glitches could quickly damage the company's carefully crafted brand name. "In three or four years, they'll be known for 'big,'" says CDNow CEO Jason Olim. "Well, whoop-di-do."

In the end, Amazon's success or failure will ride on maintaining a delightful experience for all of those new customers. Indeed, satisfied Amazon customers may well be helping more than most people realize: Analysts say one key to the sky-high stock price, which underwrites so much of its continuing opportunity, is that investors can get a personal feel for

Cover Story

Satisfied customers are buying the sky-high stock that is underwriting Amazon's expansion plans

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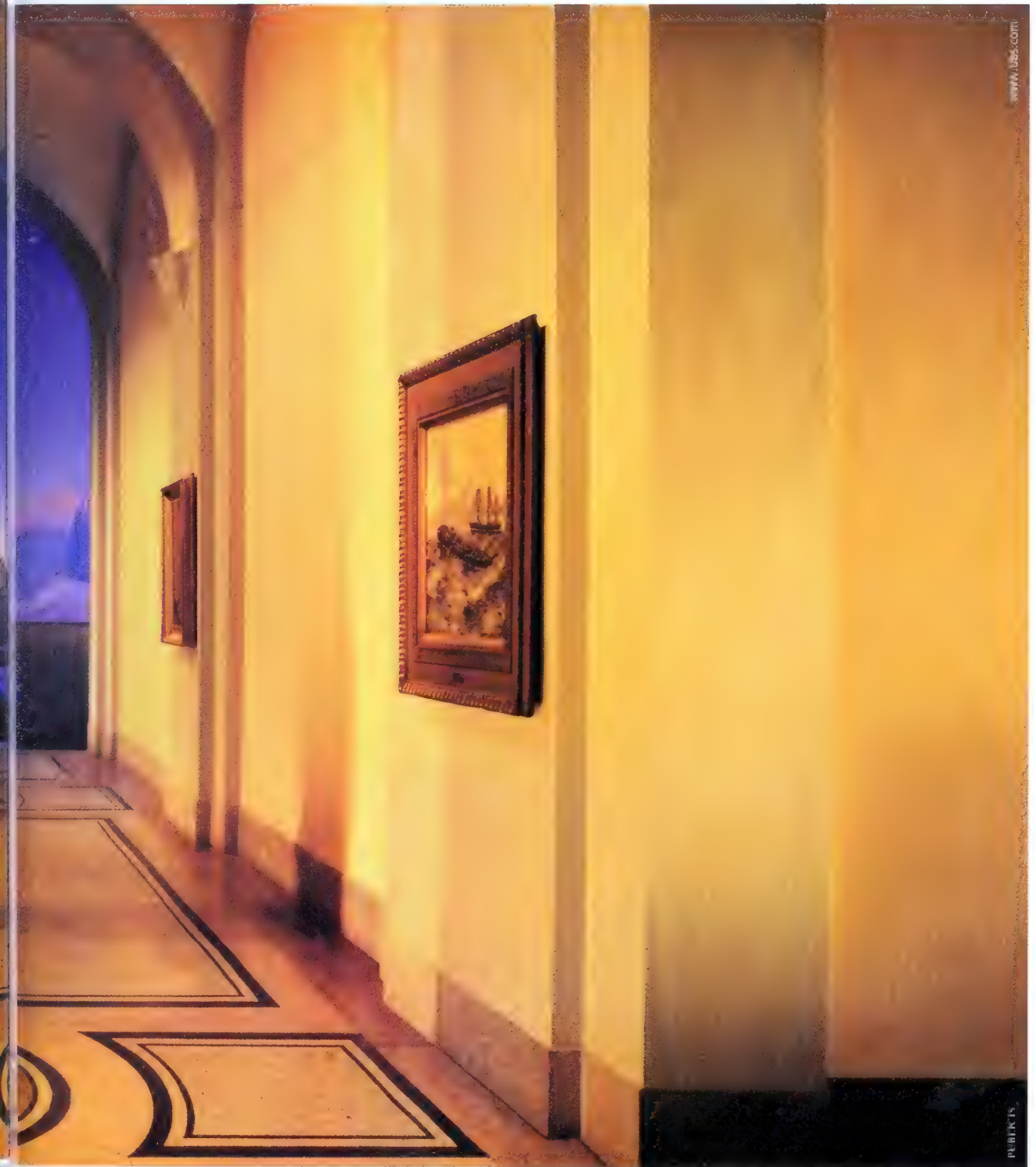
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6. Set up a new derivative pricing model.
7. Put together a 3D animated short film.
8. Lay out the company newsletter.
9. Analyze data from radio telescopes.
10. Edit digital video.
11. Design a new kitchen.
12. Develop new software.
13. Develop new CD-ROMs.
14. Retouch swimsuit photos.
15. Play photo-realistic 3D video games.
16. Assist with scientific visualization.
17. Play back audio CD.
18. Expedite numerical analysis.
19. Do mail merges for the high school reunion (unless you went to a really small high school).
20. Aid in digital signal processor design.
21. Do database programming.
22. Use lots of floppy disks.
23. File income tax returns.
24. Composite digital video.
25. Author virtual reality.
26. Store a large number of files.
27. Connect to a large number of external storage devices.
28. Play educational CD-ROMs.
29. Conduct virtual reality demonstrations.
30. Balance the checkbook for a

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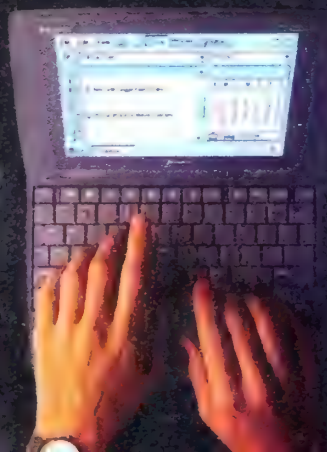
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nazon's prospects by trying it out—something that's tough to do with most technology companies. Says Halsey Minor, CEO of online network CNET Inc.: "His greatest advantage is not of people who buy his stock buy his books." But Bezos knows that advantage is a tenuous one. "There are plenty of opportunities to stumble and become a Visi-lic," he says of the pioneering spreadsheet that is now all

but forgotten. Bezos is acutely aware of Amazon's place in history. He carries a camera in his pocket, snapping a photo a day to provide a reminder years from now of what really happened—though it seems unlikely anyone will forget.

By Robert D. Hof in Seattle, with Ellen Neuborne and Heather Green in New York and bureau reports

THE TORRENT OF ENERGY BEHIND AMAZON

When Jeffrey P. Bezos was three, he got frustrated sleeping in a crib. His mom didn't think he was ready for a real bed, but Jeff was having none of that. Soon after, Jacklyn Gise Bezos found her son—screwdriver clutched in his tiny hand—trying to dismantle the crib to make it more like a bed. She sighs: "I knew I had met my match."

Bezos still gives fits to his elders—the likes of Barnes & Noble and Wal-Mart. With a genial manner, he seems an unlikely E-commerce mogul. Yet he has made almost no visible missteps since he conceived the idea of Amazon.com Inc. in early 1994.

Back then, Bezos was the youngest-ever senior vice-president at investment banker D. E. Shaw & Co., charged with finding Net ideas to invest in. After surfing the Web for the first time, he hit a site that said the Web population was growing 2,300% a year—and the light bulb went on.

ON THE ROAD. Bingo. Within weeks, Bezos passed up a fat bonus and hit the road. His wife MacKenzie drove while Bezos pecked out a business plan on a laptop and called prospective investors before settling on Seattle for its technical talent and proximity to Ingram Book Group's Oregon warehouse.

The son of a Cuban refugee who is still an Exxon Corp. executive, Bezos displayed an unusual intensity and drive early on. He got so engrossed in activities at Montessori preschool that teachers had to pick him up in his chair to move him on to new tasks. Growing up in Houston, Bezos spent summers on a family farm in

Cotulla, Tex., developing a love for science from his grandfather, a retired manager for the Atomic Energy Commission.

By the time he was 14, he wanted to be an astronaut or a physicist. The family garage was always filled with his projects, from a vacuum on its way to becoming a hovercraft to

they can revolutionize," says Bezos.

The vision thing isn't all he has brought to Amazon. His energy—he runs up and down the company's three flights of stairs—provides much of the place's electricity. Whenever there's a game of hockey-like broomball, he's the first to tear off his shirt, wrap it around his head, and let out a rebel yell.

But fun and games are few and far between. Bezos works so much that he and MacKenzie haven't found time to move out of their tiny studio apartment. "Sometimes I yell at him because it's so hard to get together," says buddy Nick Hanauer, owner of a Seattle bedding company.

Bezos expects total dedication from people at Amazon, too, where the hours can be grueling. Says Acting Cus-

JEFFREY P. BEZOS



BORN Jan. 12, 1964, Albuquerque.

EDUCATION B.S., electrical engineering and computer science, Princeton University. Miami's Palmetto High School class valedictorian and president.

FAMILY Married to MacKenzie, a novelist. Brother, Mark, and sister, Christine. Father Miguel left Cuba in early 1960s. Works as an executive at Exxon. Mother Jack-

lyn Gise Bezos worked in a bank.

DISTINGUISHING CHARACTERISTIC Seattle's loudest laugh.

CHILDHOOD CAREER GOAL Astronaut.

EARLY ENTREPRENEURSHIP Formed the DREAM Institute in high school to encourage creative thinking among young students.

EMBARRASSING MOMENT Got ticket for careless driving as a teen after screeching to a halt in front of a state trooper.

PET Dog Kamala, named after obscure *Star Trek* character.

HOBBIES Amazon, family, Amazon, hiking, Amazon.

FAVORITE BOOK Kazuo Ishiguro's *The Remains of the Day*.

BOOKS READ THIS YEAR 35.

an umbrella soon to be a solar cooker. He flexed his entrepreneurial muscles while in high school when he thought up the DREAM Institute, a summer-school program to encourage creative thinking in young school kids. He even charged his brother and sister to attend.

At Princeton, Bezos quickly veered to computers, earning degrees in electrical engineering and computer science. "I've always been at the intersection of computers and whatever

calls bringing a long list of her job goals to Bezos early on. He handed her his own list, saying: "You tell me what's more important."

Still, there's one thing that disarms just about everybody—Bezos' explosive laugh. When he yuks it up in his office, they say he can be heard down the hall, upstairs and downstairs, too. But then, with his Amazon stock worth \$4.4 billion, he has a lot to laugh about.

By Robert D. Hof in Seattle

Cover Story

tomer Service Director Jane Slade: "This is everyone's wife, mother, father, baby, whatever." He routinely ratchets up goals for managers and often plunges into minute details himself. Slade, for instance, re-

Internet Stocks

WHAT'S THEIR REAL WORTH?

New methods show why the bets are so risky

I have some Internet stocks... I'd sure like to buy more. But I'll think to myself, these stocks are ridiculously high, they CAN'T go higher. BUT THEY DO... I can't bear missing out on the excitement. But I also can't connect reality to what I see in the stock valuations.

—A recent E-mail at the Internet Stock Report at Internet.com

Maybe you're not trading Internet stocks, but if you're watching them fly, you know what that E-mailer is talking about. Trying to get your arms around the value of an Internet stock is like trying to hug the air. By time-tested valuation methods, such as price-to-earnings or price-to-sales ratios, they trade at ethereal levels, leading most Wall Streeters to knock them, only to see them go higher and higher.

Are we missing something? Or is Internet investing a mania fated to come to a bad end? That's the \$64 million—or \$64 billion—question of the day. And to answer that, analysts and portfolio managers are coming up with new ways of valuing Net stocks. Some border on the ridiculous, others are serious attempts to get a handle on the value of companies operating in an industry that is revolutionizing the economy. No method is the panacea, but some will give you insight into the bet you are making when you buy these stocks.

It's not easy to develop a valuation model that explains why a Net stock that trades at 300 times next year's earnings is a steal. Certainly, there's evidence to suggest that the people trading these stocks are not the type to dissect financial statements (page 122). "I bought eBay (at \$125) because I thought it would go up fast," says Rod Puckett, 27, a

contractor in Rockford, Ill. "These stocks are like McDonald's when it first came out, I hope."

Still, in the quest for the Holy Grail of Internet valuation, analysts are slicing, dicing, and torturing numbers until they can be molded into what might pass for a rationale to back up a table-pounding investment recommendation.

Perhaps you can't be persuaded to buy Yahoo! for 30 times projected 1999 earnings. Is there a way to make the stock more compelling? Shaun G. Andrikopoulos, who allows Net stocks for investment bank BT Alex. Brown 12, came up with Theoretical Earnings Multiple Analysis, or TEMA. By that measure, which projects future earnings by estimating revenue growth and the operating margins that the company would hope to achieve when it has matured, Andrikopoulos says the p-e on year 2000 earnings is just 12. But factor in a revenue growth that's 55% higher—and he thinks Yahoo!, with a history of higher-than-expected sales growth, deserves that—and the TEMA p-e drops to 124. He's recommending the stock.

The analyst claims that his model gives a "feel for the realistic theoretical earnings power of Yahoo!" Realistic theoretical earnings? That might fly in an investment bank, but in English it's oxymoronic.

VISITOR COUNTS. Net stocks move so fast these days that the recommendations become stale in no time. On Oct. 29, analyst Steven R. Horen of NationsBanc Montgomery Securities recommended Amazon.com Inc. at 117, about 8.5 times 1999 sales, and set a target of 150 in 12 months. The stock hit 150 in three weeks. Horen still rates Amazon.com a buy, as do 10 other analysts. "I'm not in the business of changing my recommendations every three days," he says.



VALUING AN INTERNET STOCK

One way is to start with the market price of the stock and determine what kind of revenue growth that price implies. The question then becomes whether that growth rate is realistic. Let's take Amazon.com. An analytical approach called Economic Value Added (EVA) indicates that with the stock at 214 a share, investors are implying that revenues will grow 59.6% a year over the next 10 years, taking annual sales to \$63 billion from the current \$587.6 million.

HERE'S HOW THOSE CONCLUSIONS WERE REACHED

► First to be determined is the current operations value (COV) of the company—what Amazon.com would be worth if there were no further growth. But hold on—it's not making money now. Sure, but that's due to large startup costs. Once those costs are out of the way, assume that the company will earn a normal operating margin of 10%. So to determine COV, assume the company is earning its average long-term margin and is now profitable. Once the COV is known, it can be used with the market value (MV) to determine the future growth value (FGV).

$$\text{MARKET VALUE (MV)} = \text{CURRENT OPERATION VALUE (COV)} + \text{FUTURE GROWTH VALUE (FGV)}$$

NOW, SOME NUMBERS ARE NEEDED

WHAT'S KNOWN FOR CERTAIN?

| | |
|--------------------|----------------|
| STOCK PRICE | 214 |
| SHARES OUTSTANDING | 50.2 MILLION |
| MARKET VALUE | \$10.8 BILLION |

WHAT ASSUMPTIONS HAVE TO BE MADE?

| | |
|--|-----------------|
| SALES IN 1998 | \$587.6 MILLION |
| OPERATING MARGIN | 10% |
| NET OPERATING INCOME AFTER TAXES (NOPAT)
(ADJUSTED FOR STARTUP COSTS) | \$41.1 MILLION |

► To get current operation value (COV), start with 1998 adjusted net operating income after taxes (NOPAT), \$41.1 million. What would \$41.1 million over the next 10 years be worth? To get that number, a discount rate, or the cost of the capital needed to generate those earnings, has to be assumed. Because the stock is volatile, assume a high cost—15%. To get the COV, divide \$41.1 million by 15%, which yields \$274.2 million. With no future growth, that's what the company would be worth. A pittance—only \$5.50 per share. Investors are obviously betting that growth will continue to soar.

NOW, IT'S EASY TO DETERMINE AMAZON'S FUTURE GROWTH VALUE

► Simply subtract \$274.2 million from the current market market value (\$10.8 billion), which gives \$10.5 billion. The question now is: How fast do revenues have to grow over the next 10 years to give you a future growth value of \$10.5 billion? The answer is 59.6% a year, assuming margins of 10% and a 15% capital cost.

► Next question: Can Amazon.com sustain that kind of growth? As E-commerce draws more competitors, it's probably an unrealistic assumption.

DATA: CHARLES R. WOLF, WARBURG DILLON READ; BUSINESS WEEK

The problem with the valuation methods that result in earnings forecasts is that they require estimates of revenue with, profit margins, and other important inputs. That's especially problematic when you have a company with little history and an inchoate business plan. Even thoughtful estimates are still guesses, and a bad one will throw a valuation skitter—making the stock seem either too cheap or too dear—so an ideal valuation method would be one that minimized the guesswork.

That's why some followers of the Net stocks, such as Steve Harmon, the senior investment analyst at Internet.com, look at figures that don't have to be guessed, such as the number of individuals who visit a Web site. That data is reported by Media Metrix Inc., a Web research firm. The numbers show that 25.2 million people used Yahoo! at least once in October. By dividing the number of Yahoo! visitors into the market cap of \$19.7 billion, you get a cost of \$782 per visitor. Compare that to Lycos Inc., which works out to \$135 per visitor, and Excite Inc. at \$165. "When you look at these companies' user values, you appreciate the disparities," says Harmon, "and that leads to good questions." Is a Yahoo! visitor more valuable than one at Excite? Perhaps. If Yahoo! continues to outdraw the others, it deserves a premium. Is it worth nearly five times as much?

The problem with such relative value measures is that while they may help identify undervalued and overvalued companies in similar businesses, they can't address the most important question: whether the whole industry is overvalued. A different approach to valuation turns the whole issue on its head and is on the frontier of investment analysis. Instead of forecasting all the inputs to come up with a number for what the stock should be worth, this method starts with the stock price and works backwards to answer the question: What kind of growth does this company have to deliver to justify this price? This method does not avoid making some assumptions, but it's a way to perform a reality check.

Look at Amazon.com. At the recent price of 214, the market is implying that Amazon's revenues will increase 59.6% a year over the next 10 years (table). That's the conclusion of

The new approach starts with stock price and then works backwards to see what kind of growth would justify it

veteran securities analyst Charles R. Wolf of Warburg Dillon Read.

To come to that conclusion, Wolf uses a valuation method built on Economic Value Added (EVA), a concept developed by Stern Stewart & Co., a management consulting firm. The idea behind EVA is that in the long run, it's not accounting profits—taking in one more dollar than you put out—but economic profits that matter. And simply put, a company earns an economic profit only if it has earned more than its cost of capital, which is not found on an income statement.

Cover Story

EVA was originally designed as a management tool, not for investing. But some,

including Steve O'Byrne, a former Stern Stewart consultant who now has his own firm, and Wolf have adapted EVA principles for investment analyses.

COMMON SENSE COUNTS. The idea in EVA analysis is that the market value—the stock price times number of shares—has two components. One, the Current Operations Value (COV), is a measure of the worth of the company as it now operates. The second, Future Growth Value (FGV), measures the company's expected growth. Once you determine the COV—and that's the easier of the two—you can figure out the implied future growth value. And once you know that, you can determine the implied revenue growth rate. Then you can make a judgment as to whether that growth rate is achievable.

Critical to the analysis is the cost of capital. For Amazon.com, Wolf estimates a cost-of-capital charge of 15%, a figure derived from such variables as the risk-free rate of return, the extra return that equities historically return over

bonds, and Amazon's "beta," or price volatility as compared with the stock market.

Can Amazon.com achieve a nearly 60% average annual revenue growth rate over 10 years? That's where investors must turn to industry fundamentals and old-fashioned common sense. For instance, using Wolf's calculations, Amazon should reach sales of \$63 billion in 10 years. Is that realistic?

Not by a long shot. U.S. retail book sales in 1997 were \$11.8 billion, and they're not expected to be much higher in 1998. Even if the book market expanded at 3% a year, would be only around \$16 billion 10 years out. True, Amazon is selling recorded music, but that market is no larger than books, with growth prospects no better. "Amazon has to sell a lot more than books, CDs, and videos if it's ever going to reach the revenue growth implied in the price," says Wolf. True, that's in the company's plans. But as it changes from bookstore to a mass marketer, it will run up against competitors. Says Wolf: "Barriers to entry are low, and others can easily underprice them."

The Internet is probably the most sweeping and potentially powerful medium to come along since television. There's the question that enormous growth is there, but how much should investors pay for that potential? Whether you're weighing revenue projections for Amazon or any other Net stock, it might be useful to note that at Microsoft Corporation, perhaps the most successful company in recent history, revenue growth averaged 43% a year since it went public in 1986. Keep that in mind when you're tempted to buy a Net stock that requires a 60% growth rate to justify its price.

By Jeffrey M. Laderman in New York, with Geoffrey Smith in Boston

WHERE THE BIG BOYS FEAR TO TREAD

Who's driving Internet stocks sky high? It's the small investors, according to traders and market watchers. "With valuations going through the stratosphere, institutions have stepped aside and left a wide open playing field for retail investors," says Martin C. Cunningham, senior vice-president of trading for Charles Schwab Corp.'s Mayer & Schweitzer Inc. unit, one of the largest market makers in Net stocks.

Indeed, thousands of at-home investors are taking advantage of cheap online commissions and loads of information on the Internet about Internet stocks. Data compiled by Birinyi Associates Inc. show that small investors—those who make 100- and 200-share trades—are by far the most active traders in Net stocks (table). Just compare: The average trade in Yahoo! Inc. in November was 438 shares, less than one-tenth the 4,051-share average in America Online Inc., a far larger

SMALL INVESTORS DRIVE THE NET STOCKS

Except for America Online, the small size of the average trade suggests retail investors rather than big institutions dominate Net investing.

| STOCK | NUMBER OF TRADES | NUMBER OF SHARES TRADED (MILLION) | AVERAGE TRADE SIZE |
|----------------|------------------|-----------------------------------|--------------------|
| NOVEMBER, 1998 | | | |
| EBAY | 183,691 | 57 | 310 |
| YAHOO! | 424,016 | 185 | 438 |
| AMAZON | 239,550 | 108 | 453 |
| LYCOS | 178,843 | 104 | 580 |
| AOL | 59,621 | 241 | 4,051 |

DATA: BIRINYI ASSOCIATES INC.

company, and one with an institutional following.

Concerned about the feeding frenzy, brokerage firms are raising margin requirements on Net stocks, demanding customers to put up more cash. Brokers stand to lose big if the

stocks plunge and customers can't pay off their loans.

Institutions aren't completely ignoring Net stocks. In the first few hours of trading in Yahoo! on Dec. 1, a few large trades crossed the tape, including one of 200,000 shares and another of 29,500 shares. "Some institutions have jumped in just to add a dash of spice to their portfolios, almost like they used to use derivatives to goose returns," says Kevin Landis, manager of four high-tech mutual funds run by Firsthand Funds.

Several mutual-fund managers say that they are avoiding high-priced Net companies because so few shares are available for trading that they can't accumulate stakes without driving prices even higher. But that doesn't mean the pros aren't interested. Says Landis: "If prices were to fall say, 40%, these stocks would be a buy."

By Geoffrey Smith in Boston



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of
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your
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FIGHTER PILOT

Can Robert Benmosche breathe new life into MetLife?

At Metropolitan Life Insurance Co., tradition still plays a weighty role. Just visit its ornate boardroom at One Madison Avenue in Manhattan. The room lies deep within the fortresslike building that MetLife built in 1893, 25 years after its founding in 1868. It boasts 27-foot ceilings painted with 18-karat gold, a massive mahogany fireplace, and solemn portraits of past chief executives with patrician names like Haley Fiske.

On Nov. 24, the MetLife directors, including the CEOs of Pfizer Inc. and Bethlehem Steel Corp., gathered in the boardroom to make a historic decision. After operating as a mutual company since 1915, the board authorized management to develop a plan to abandon its mutual status and go public, or "demutualize," using a novel trust structure (page 126). The architect of the board's decision, which was announced on Nov. 29, is Robert H. Benmosche, MetLife's new CEO. His main argument in favor of demutualizing: For MetLife to tap its intrinsic value, energize its culture and make acquisitions to stay competitive, it must become a public company. "This sleeping giant is no longer asleep," says Benmosche, pronounced BEN-mo-shay. "We're going to wake up the world."

ALARM BELLS. Brave words. But in an industry of sleepy mutual life insurers, MetLife is one of the most somnolent—stodgy, bureaucratic, behind the times. For example, MetLife's average return on assets was 0.38%, one of the lowest of any large mutual, says analyst Neil Strauss at Standard & Poor's Corp. (table). The cause is decades of mutual ownership, a structure with little real accountability to policyholders.

The unlikely man chosen to wake up MetLife is not a seasoned insurance ex-

ecutive but a man who hails from the operations side of a Wall Street brokerage house. Benmosche's job: transform MetLife into a nimble, performance-oriented public company. He must get 41,000 employees to shake the "Mother Met" mentality and teach 10,100 agents how to sell more than whole life insurance, which is declining in popularity.

Benmosche is up against legions of more skillful rivals, from American International Group, which just bought SunAmerica, a fast-growing annuity firm, to Merrill Lynch. By almost any measure of performance, MetLife has a ways to go. Public insurance companies have re-

turns on equity of between 11% to 18%, while MetLife hopes to have an ROE of 8% in 1999. SunAmerica's return on assets is 2.25%, six times MetLife's.

Benmosche, who became CEO on July 1, has begun rousing MetLife with the impact of a fire alarm. After 14 years at PaineWebber Inc., the husky 54-year-old caught the eye of MetLife's then-CEO, Harry P. Kamen, and signed on in

September, 1995. Benmosche quickly rebuilt MetLife's sales force, which was decimated by a sales-practice scandal. And he has imported the brokerage industry's more sophisticated marketing, compliance, and technology to mutual life insurance, the laggard of the financial-services world.

Benmosche also has the huge challenge of managing MetLife's initial public offering, which will be a remarkable one-time distribution of about \$20 billion to MetLife policyholders. Benmosche must divvy up these billions fairly among MetLife's small policyholders and its 60,000 corporate policyholders, some 12 million in all.

MetLife's deal will be among a spate of insurance IPOs, including Prudential Insurance and John Hancock Mutual Life Insurance. Indeed, the avalanche of equity will be so large that MetLife has to

TRAILING THE PACK

| MUTUAL LIFE INSURANCE COMPANIES | RETURN ON ASSETS* |
|---------------------------------|-------------------|
| METLIFE | 0.38% |
| PRUDENTIAL | 0.55 |
| MASSMUTUAL | 0.71 |
| JOHN HANCOCK | 0.91 |

*Average return for 1995, 1996, and 1997, using statutory net operating income

DATA: STANDARD & POOR'S

BENMOSCHE'S BATTLE PLAN

How the new CEO plans to galvanize the old-line insurer

- ▶ Transform stodgy ways into entrepreneurial culture
- ▶ Get New York State Insurance Dept. and Securities & Exchange Commission approval of demutualization plan
- ▶ Execute initial public offering in 1999 that's fair for company and policyholders
- ▶ Use MetLife stock to make acquisitions
- ▶ Increase return on equity from 8% to 15% industry norm
- ▶ Provide more financial services by educating agents
- ▶ Settle old sales practices scandal with plaintiff's attorneys

DATA: BUSINESS WEEK



“This sleeping giant is no longer asleep. We’re going to wake up the world”

— CEO ROBERT BENMOSCHE

avoid getting caught in the glut. “The demutualization process is the largest single event in the U.S. equity markets for the next three to four years,” says a Merrill Lynch & Co. investment banker. “The industry will create \$100 [billion] to \$200 billion of new stock.”

INTERIM STEP? Full demutualization, though, was not Benmosche’s first choice. In fact, he was adamantly opposed to it. In a full demutualization, policyholders would receive 100% of the company in MetLife stock. Instead,

Benmosche lobbied the state of New York, which regulates MetLife, to be allowed to set up a mutual holding company, which could sell 49% of itself without distributing that stock to policyholders.

The advantage: MetLife could go public much more quickly.

But the holding company move could have reduced policyholders’ stake in MetLife from 100% to 51%. “They [MetLife] were selling their policyholders’ interests out from under them,” says George Trumbull, CEO of AMP, an Australian insurer that just demutualized. Adds David Schiff, editor of *Schiff’s Insurance Observer*: “MetLife is not covered with glory.” Benmosche now says that the holding company would only have been an “interim step. Eventually, we would have fully demutualized.”

This fall, though,

New York lawmakers rejected pending mutual holding company legislation because it was so unfair to shareholders. Meanwhile, a bill in Congress that would have permitted banks to buy mutuals—including MetLife—died. That gave MetLife some breathing room. As a result, Benmosche felt that his best option was to push for a full demutualization.

Without a doubt, Benmosche’s current plan to demutualize treats policyholders far more equitably. The plan is quite novel: It would set up a trust that would hold policyholders’ shares for them, much like a mutual fund. For MetLife, the trust would reduce the huge administrative costs of servicing 12 million shareholders—some four times the number of shareholders any U.S. company has now. Yet shareholders are able to hold on to their stock. In many past demutualizations, small shareholders were forced to sell their shares.

EGO BOOST. If the deal goes through, policyholders might consider holding on to their stock. With \$172 billion in assets and a strong brand name, thanks to the use of the “Peanuts” character Snoopy, MetLife has vast potential—which hasn’t gone unnoticed. Earlier this year, before he approached Citicorp, Sanford I. Weill tried to get Benmosche to sell MetLife to Travelers Group Inc. Months later, Warren E. Buffett met with Benmosche about investing billions in MetLife. “It’s a great American institution,” says Benmosche.

Yet MetLife’s core business of selling whole life insurance to the middle class is in trouble. Premiums paid for new life insurance sales by MetLife agents have dropped for the fifth straight year, to about \$290 million in 1997. While agent productivity has increased, it is still below the industry average. At least MetLife’s New England agents sold \$247 million of new life premiums in 1997, up 10% from 1996. And all agents’ sales of other financial products are growing. MetLife’s other major business, providing corporations with insurance to offer their employees, is going strong: It has a 22% market share here.

Benmosche clearly relishes being at the helm of this vast empire—as well as the perks, which include traveling by corporate jet and attending black-tie

MetLife stopped losing agents—and productivity rose—after Benmosche met with thousands of salespeople

MIXING IT UP AT A CORPORATE RETREAT IN PUERTO RICO

parties such as opening night at the New York Philharmonic, where he is a new board member. And he must have enjoyed being courted by the most powerful men on Wall Street for the prize of helping MetLife become a public company. For 10 hours on July 1, his first day as chief executive, Benmosche was wooed by five Wall Street chieftains. He chose Goldman, Sachs & Co. and Credit Suisse First Boston.

But despite the ego boost, Benmosche retains the common touch, undoubtedly a result of his humble origins. He grew up in the Catskills town of Monticello, N.Y. His father died at the age of 50, leaving Benmosche, then 10, his mother, and three other young children. His father also left a hotel and restaurant, which the family continued to run, and \$250,000 in debt. During high school and as a math major at Alfred University in upstate New York, he paid for most of his tuition by driving a Coca-Cola Co. delivery truck in the summer. Benmosche was in the Army during the Vietnam War and spent 13 months in Korea in the U.S. Signal Corps, setting up field communications.

That set him on a career as a techie. He worked as a computer consultant from 1966 to 1975, then joined Chase Manhattan Bank to work in its systems group. "He was one of the smartest, hardest-working, most intense executives there," says James C. Curvey, a Chase colleague who is chief op-

erating officer of Fidelity Investments. "He's very results-oriented."

In 1982, Benmosche was hired by PaineWebber, where he earned a reputation as a troubleshooter who stepped on toes but got the job done. He first created a knockoff of Merrill Lynch's Cash Management Account, an all-in-one checking and brokerage account. He then headed operations and moved PaineWebber's back office to a new, cheaper facility just in time to weather the 1987 stock market crash. Later, he headed systems and managed 1,500 retail brokers. "You love him or you don't like him at all because of his sometimes confrontational style," says Martin A. Stein, a vice-chairman at BankAmerica Corp. who has known Benmosche for 25 years.

DEMANDING. Benmosche's tough managerial style was put to the test in his first years at MetLife. In 1993, Kamen, Benmosche's boss, was confronted with a terrifying problem. Agents in MetLife's Tampa office were found to have sold life insurance to nurses with the ruse that it was a retirement plan. The ensuing investigation and publicity caused agents to leave in droves, and sales plummeted. The issue overwhelmed Kamen, who had spent 30 years in MetLife's legal department. "He didn't understand the problem, but he knew it was big and real and dangerous," says Benmosche.

In 1996, Kamen put him in charge of MetLife's retail sales force of 7,800. Benmosche visited a number of MetLife's 428 sales of-



fices, often accompanied by his wife Denise, and met with agents one-on-one and in large meetings. He persuaded the board to allow him to focus on agent retention rather than agent recruiting, a controversial strategy at the time. Benmosche refocused on compliance and productivity. He halted the loss of agents and slowly boosted productivity per agent from \$19,000 to \$23,000. And sales practice and service complaints are down 50% from the peak in 1994, says MetLife.

As CEO, Benmosche is far more demanding than Kamen. "My style was to meet with the group and let them lead me to the right conclusion. Not to come in and say what we would do," says Kamen. "Bob thinks he knows what he should do. It's more confrontational."

Benmosche is at his best mixing with the troops. At a New Jersey conference center earlier this year, he spent four hours encouraging some 40 branch managers to stop blaming the company for their problems and to take responsibility for finding solutions. He even gave out his direct office phone number and offered to meet "anyone anytime anywhere" to help resolve their issues. His real fight, he knows, is in the trenches, empowering employees to change the bureaucracy. Now, with the clock ticking to go public, there's no turning back.

By Leah Nathans Sproull
in New York

HOW THE PROPOSED METLIFE TRUST WOULD WORK*

1. In 1999, MetLife plans to convert to a stock company. The shares will be deposited into a trust.
2. It will allocate shares to its 12 million policyholders based on the type of policy and length of ownership. After the IPO, policyholders will get an average of about \$1,600 worth of stock.
3. Policyholders can sell their shares at the market price commission free by calling the trust. To save money, shareholders won't receive stock certificates for their shares and won't get annual reports unless requested.

*Deal still must be approved by the New York State Insurance Dept. and the Securities & Exchange Commission

DATA: METLIFE, BUSINESS WEEK



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BY GENE G. MARCIAL

FINGERHUT GETS A GRIP ON THE NET

Fingerhut (FHT) is getting fresh attention from investors: Some pros see the stock as an important and undervalued Internet play. On Nov. 30, the stock shot from 9 to 11 after the company, a direct-mail marketer of housewares, home electronics, and a wide range of other products and services, reported unusually strong sales over Thanksgiving—helped by Internet shoppers. Fingerhut stock is up 50% so far this year. One New York money manager says it “is an easy double in the next 6 to 12 months.”

More and more people see Fingerhut “as well positioned to become a major electronic-commerce player,” says analyst Michael Millman of Salomon Smith Barney. The catalog merchandiser’s “Internet sizzle,” he notes, stems from its special capabilities—from Web-site development to collections and back-office functions.

Millman says that Fingerhut, which brought in William Lansing as president last May, plans to increase its stake in more Web sites. Currently, Fingerhut has five sites and a 20% stake in PC Flowers & Gifts, an Internet retailer. Lansing, a former General Electric vice-president for

business development, notes that Fingerhut’s Internet sales are 2% of the total, or more than \$30 million. The Internet is “pretty much our growth focus,” adds Lansing, who was chief operating officer at Prodigy, an online joint venture of IBM and Sears Roebuck, before he went to GE.

To expand Fingerhut’s E-commerce, the company is working on forming strategic partnerships with several major Internet players. Lansing expects Internet sales to more than triple, to \$100 million, in 1999.

Fingerhut’s proprietary database, analysts note, equips it to supply clients with credit information. On the Inter-

net, Fingerhut has the advantage of providing revolving credit: Customers wary of sending their credit-card information across the Web, for example, could put their tab on a Fingerhut revolving charge account. Millman expects Fingerhut to earn 90¢ a share in 1998 and \$1.05 next year.

AT&T COULD BRING NEW ZING TO TCI

It isn’t at all certain that AT&T’s proposed acquisition of Tele-Communications (TCOM) will get government approval: Some fear that the merger may harm competition in telephone, video, and data services. Skepticism



SCHAPIRO: A giant gain if the merger passes muster

about the deal has restrained TCI’s price advance—from 32 in mid-June to 41 currently. So why is investment manager Ken Schapiro loading up on TCI? There is only a modest downside risk if the merger fails—and a gigantic gain if it passes muster, says Schapiro, president of Con-

dor Capital Management, which focuses on large-capitalization technology stocks. If the deal fails, “you’re still left with a premier player in cable and the Internet,” says Schapiro. TCI is the second-largest cable operator in the U.S. and has been spending big to develop new services—including digital cable, which will provide Internet access and phone service over cable-system lines. “TCI’s digital cables provide more bandwidth than Baby Bell technology,” he says. Besides, he adds, cable is red-hot, and “we’re sure another suitor will emerge should AT&T fail to bag TCI.”

But if the deal is approved, “you get AT&T stock at a 15%-to-20% discount, depending on TCI’s stock price,” notes Schapiro, who thinks that AT&T under CEO Michael Armstrong will be flying high. With TCI, AT&T would be able to offer local phone service and Internet access over TCI’s cable lines, which are 100 times as fast as conventional dial-up modems, says Schapiro. He thinks that by mid-1999, TCI stock, now at 41, will hit 55.

A BREATH OF FRESH AIR FOR INHALE

It is unusual for a big pharmaceutical house to plunk down hundreds of millions for a product still in clinical trials—and whose approval by the Food & Drug Administration is two years away. But that’s what Pfizer did for Inhale Therapeutic Systems (INHL), whose device lets patients inhale drugs—including insulin for diabetics.

Last month, Pfizer signed a pact with Germany’s Hoechst Marion Roussel to build a jointly owned plant in Frankfurt, estimated to cost \$500 million to \$800 million, to produce bulk insulin. The two will also help Inhale develop and promote the inhaled form. “The Pfizer and Hoechst commitment underscores the size of the market that the two drugmakers expect,” says Caroline Copithorne, a biotech analyst at Prudential Securities.

Pfizer’s pact with Hoechst—a top insulin maker—puts Inhale’s product in a stronger marketing position, she adds. From the insulin supplied by Pfizer and Hoechst, Inhale produces dry-powder insulin. It also makes inhalers.

On Nov. 7, Pfizer, which owns 5% of Inhale, started Phase III trials for inhaled insulin. Analyst Peter Ginsberg of investment bank Piper Jaffray expects Inhale to file with the FDA in the first half of 2000, which could lead to approval in early 2001. He reckons there are 4.1 million diabetics who could use inhalable insulin, leading to potential U.S. sales of \$3.3 billion a year.

A New York money manager figures Pfizer and Hoechst will produce worldwide sales of \$300 million in 2001. Figuring a modest 15% royalty, he calculates that Inhale could earn pretax \$45 million, or \$3 a share. On that basis, he says the stock, now at 31, is worth 45 to 50.

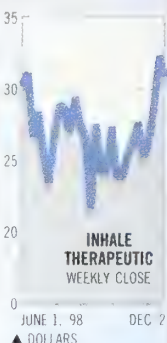
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A SURGE AT THANKSGIVING



HEADY DAYS AFTER THE PACT



The most ambitious business plan in history will soon be set in motion. On January 1, eleven EMU nations will begin valuing everything from stocks to their national debts in euros. As a group, they will form one of the world's strongest monetary blocs. A single unified front with sufficient clout to withstand the random turbulence of today's international markets. The question is – how prepared are you for what lies ahead?

Euready ^{ING}

The fact that ING is one of Europe's largest financial institutions does not fully express our readiness for the euro. The real explanation lies in our ability to think and anticipate change as a group. Recently, this led to our acquisition of Belgium's BBL and our strategic investment in Germany's BHF Bank. It has also resulted in the creation of "euronavigation" – a new means of electronic banking that allows companies to steer all their international cash management activities from a single account. By now, ING is one of a select group of companies to provide banking, insurance and asset management services on a truly Pan-European basis. This, we think, explains how ready we truly are for the big event on January 1. Prepared to find out what the euro and ING can do for you? Visit www.inggroup.com or send an e-mail to inggroup@inggroup.com

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INTERNET

ANYTHING YOU SELL, I CAN SELL CHEAPER

Buy.com uses stealth technology to undercut rivals

To Internet shoppers, price matters. A lot. Just ask Scott A. Blum. The 34-year-old founder and chief executive of Buy.com reprices the 30,000 or so products in his online computer store daily, if necessary, so that he always has the lowest price. That way, when Internet-savvy shoppers use price-comparing Web technology to search out the best deal, Buy.com always comes up on the top of the list.

It's working. In the first 11 months that Buy.com has been shipping computer gear—through Oct. 31—sales topped \$86 million. They are currently running close to \$1 million a day, and Blum expects they will reach \$120 million to \$130 million for the calendar year. That puts the fledgling Aliso Viejo (Calif.) retailer on a pace to beat Conner Peripheral's \$113 million record, set in 1987 in its first full-year sales.

BLEMISH: Blum had a run-in with the SEC

Now, Blum has a plan aimed at extending the startup's torrid pace. On Nov. 16, he changed the name of his company to Buy.com from Buycomp.com and got into the book, movie, and video game markets, going head to head with the likes of Amazon.com and Reel.com with his Buybooks.com and Buymovies.com. To get a leg up, Buy.com is acquiring Internet retailer SpeedServe Inc. from Ingram Entertainment Inc., the country's largest video and video game distributor. In exchange, Ingram will get a 5% stake in the company, now worth about \$20 million.

Buy.com is betting that its best-price guarantee will work as well for \$15 books and movies as it does for \$500 handheld computers. Blum reckons that if he dispenses with Web niceties—say, the community-like feel of book reviews



TECH UPSTARTS

and chats on rival Amazon.com's site—and sticks with bargain-basement deals, Buy.com will carve out new ground. "We're going for someone who knows what they want and wants it for the best price," he says. "We're trying to keep our site simple, effective, and easy to use—not cluttered with a lot of links and long reviews and stuff." In short, Blum figures cybersnobs may browse at Amazon but plunk their money down at Buybooks.com.

Or will they? Some experts are doubtful. "The surveys we do say that price is a huge factor in getting consumers to buy online," says analyst

Nicole Vanderbilt of market research Jupiter Communications in New York. "But with books and music, there's different dynamic." Says Amazon.com CEO Jeffrey P. Bezos: "Customers want selection, ease of use, and a low price in that order."

Who's right? To be sure, Blum is novice to the startup scene, though his record is spotty. A college dropout, started his first company, Microbank, when he was 19, making memory modules for Apple Macintosh computers. He sold that outfit in 1987 for \$2.5 million and founded Pinnacle Micro Inc. with his father, a retired Hewlett-Packard Co. executive. But Pinnacle, which made optical-storage systems for computers, ran into manufacturing problems. Two years ago, Blum and other Pinnacle

BUY.COM ON THE MOVE

OCTOBER, '96

Company founded

NOVEMBER, '97

Buycomp.com opens for Internet business

JULY, '98

Former Apple CEO Sculley joins the board

AUGUST, '98

Softbank invests \$20 million (\$40 million more in October)

OCTOBER, '98 Sales reach \$86 million

NOVEMBER, '98

Announces acquisition of Internet book, movie, and game business from Ingram Entertainment. Name changed to Buy.com

officials settled charges by the Securities & Exchange Commission that the company had used improper accounting practices to inflate sales and earnings. In the settlement, Blum neither admitted nor denied any wrongdoing.

CEO SEARCH. Today, Blum's backers shrug off his run-in with the SEC. "We like to invest in entrepreneurs with experience, good or bad. He ran into problems but learned a lot," says E. Scott Russell, a Buy.com director and general partner at Softbank Technology Ventures, which spent \$20 million for a 1% stake in Buy.com in August. In October, parent Softbank Holdings Inc. came up

SUCCESS IS A DIRECT RESULT OF AMBITION,
CONNECTIONS, OR A REALLY GOOD TO-DO LIST.



Address book



Date book



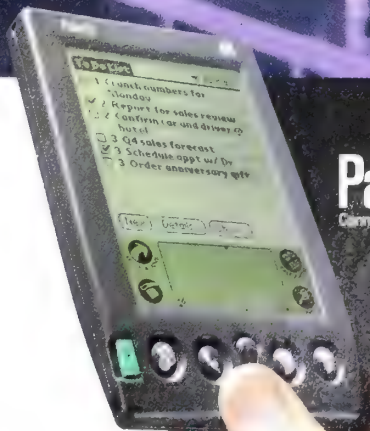
Memo pad



Keychain

Itemize, categorize, and prioritize everything you need to do. Conquer a goal with each box you check. And that's just the to-do list. With the Palm III™ connected organizer, you can store thousands of contacts and years of schedules. Even exchange that information back and forth with your PC and our HotSync™ technology. So when everything you need is right at your fingertips, who needs a corner office? Palm Computing™ connected organizers start as low as \$249*. To learn more, visit www.palm.com.

*MSRP. Prices shown are US suggested retail prices. US suggested retail prices for Palm III are \$249.99 for the Palm III and \$299.99 for the Palm IIIx.



Palm III
Connected Organizer

3Com

More connected.™

with \$40 million for an additional 10%, valuing the company at \$400 million.

The blemish on Blum's track record, however, has prompted him to launch a search for a CEO who would have credibility with Wall Street. The company, which plans to go public early next year, should have a new chief executive in place by then. "Because of my past, we're bringing in a new CEO with the intent of taking the company public early next year," Blum says. "And I assembled a great board so that I could go to them to get answers." Ingram Entertainment CEO David B. Ingram resigned Nov. 6 from the board of Ingram Micro Inc., which packs and ships Buy.com orders, so that he could take a seat on Buy.com's board once his deal closes. Other directors include former Apple Computer CEO John Sculley and PepsiCo co-founder Donald Kendall Sr.

SECRET WEAPON. Blum's success does not depend solely on selling goods. With computer gear, he uses low prices to drive customers to his site, which then sells advertising to the manufacturers it represents. BuyPrinters.com, for example, has an opening page with 12 ads that go for \$3,000 a month each, and there are more than 600 such pages on the BuyComp.com site. The company stocks no inventory. Instead, it depends on Ingram Micro in neighboring Santa Ana, Calif., to fill orders the same day.

Buy.com's secret weapon, though, is a stealth technology that allows its computers to crawl through other Web sites and ferret out rivals' prices. Instead of landing on their sites with a high-speed connection from a single Internet address—which would alert them and let them block Buy.com—the company has set up hundreds of accounts with Internet service providers, using low-speed modem connections. Each one hits a rival site no more than seven times, looking only like a curious consumer. Once the lowest price is determined, Buy.com undercuts it and sends it off to price-comparing search engines, which present it to shoppers the next day.

Blum's ambitions don't stop at books and movies either. Coming next year: music, with BuyMusic.com and even BuyJazzMusic.com. He has locked up the Internet addresses BuyCars.com, BuyInsurance.com, and even BuyCheeseburgers.com—all told, 3,000 Web addresses starting with "Buy." And just in case there's any confusion about his game plan, he owns a couple of Web addresses that he's holding in reserve. One of them: 10percentoffAmazon.com.

*By Larry Armstrong
in Aliso Viejo, Calif.*



**NAKASAKI LEADS
NTT'S U.S. FORAY**

TELECOMMUNICATIONS

NOW, THAT'S LONG DISTANCE

Foreign telcos are speed-dialing into the U.S. market

It wasn't your typical promotion for long-distance phone service. In late September, Teléfonos de México organized a soccer tournament on several dusty fields around Tucson. As players on 14 teams from Mexico and 14 teams from Arizona squared off against each other, Telmex pitched phone service—not just to the Mexican fans but to the Americans as well. Thanks to the Federal Communications Commission's approval of its application in September, Telmex has started selling its service to U.S. customers and is attracting about 350 a week. That's a pitance compared with the tens of thousands of customers AT&T nabs weekly, but it's an attention-getting start for a 12-week-old business operating in just five cities. "Both AT&T and MCI are stinging over how well Telmex is doing here," says analyst Scott Cleland of

Legg Mason Inc.'s Precursor Group.

And Telmex is just the beginning. The Mexican carrier is part of a wave of foreign telecom players that is crawling into the U.S. market and for the first time offering a viable alternative to U.S. providers on a broad range of communications services. Their collective market share is just 2% of the U.S. market, according to Dataquest Inc., but it's sure to rise: In the past year, the FCC has granted 48 licenses for overseas players to begin offering service in the domestic market, though only a few are actively doing so today.

LOWER RATES. What the foreign players are gunning for is the biggest telecom market in the world—\$200 billion in long-distance, local, data, and Internet service revenues. "It's not a full-scale invasion yet, but we'll probably see a lot of activity from most of [the major fore-



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carriers,” says Melinda Mullet, a director at consulting firm Arthur Andersen & Co. Among the most aggressive newcomers are Telmex, Japan’s Nippon Telegraph & Telephone Corp., and Britain’s Cable & Wireless PLC.

The implications could be profound. Foreign carriers are bringing a much needed dose of competition to the telecom market just as consolidation is whittling down the number of domestic players. Consider this: A month before Telmex started selling its low-cost service in the U.S. in conjunction with Sprint Corp., AT&T cut its rates from the U.S. to Mexico. Now, AT&T’s rates to Mexican border towns are 25¢ a minute, down from 49¢. “That makes it tougher for us to compete, but it’s good for consumers,” says Luis Lopez, chief executive of the Telmex operation in the U.S. AT&T says its rate changes are not in response to Telmex.

Corporate clients are likely to benefit even more than consumers from the foreign influx. Both NTT and Cable & Wireless PLC are focusing on the business market because monthly bills tend to be much larger—and profits fatter. In September, the British carrier, which has offered long-distance service in the U.S. for about 20 years, spent \$1.75 billion to buy the Internet assets of the former MCI Communications Corp.

FCC CHEERS. Now, Cable & Wireless, with a \$1 billion business in the U.S. already, will market a full range of data and voice services to its traditional customer base of small and midsize companies. It also plans to target large multinational corporations that can benefit from its assets in Europe and Hong Kong. “We’re going to have a much stronger U.S. presence than we’ve ever had,” says Carl Grivner, CEO of Cable & Wireless’ operations in the Western hemisphere. “We are positioned to connect all the dots for our customers.”

They’re not the only ones. Very quietly, NTT is building a strong position in the U.S. After receiving FCC approval to offer a full range of telecom services in September, the Japanese carrier is marketing primarily to Japanese com-



THE BRITISH (THE MEXICANS AND THE JAPANESE) ARE COMING

Foreign carriers in the U.S. market

NIPPON TELEGRAPH & TELEPHONE

Given the green light to offer service in the U.S. in September, NTT is targeting large businesses, primarily from Japan, with a combination of voice and data services. It has invested a total of \$200 million in Internet service provider Verio and wireless pioneer Teligent so it can offer innovative services to its corporate customers.

TELEFONOS DE MEXICO

Telmex is marketing long-distance and international services to Mexican consumers in the U.S. With grassroots, face-to-face marketing, the company is adding about 350 customers a week. It has drawn fire from AT&T and others for using the Mexican market as a profit haven even as it has entered the U.S.

CABLE & WIRELESS

With its \$1.75 billion purchase of the former MCI Communications’ Internet assets in September, the British-based carrier has suddenly become a major player in the U.S. market. It’s beginning to target multinational corporations based here with a full range of data and voice services.

panies in the U.S. It has attracted close to 100 corporate customers and plans to win more by offering services far snazzier than plain-vanilla phone service, says Keisuke Nakasaki, CEO of NTT America. It invested \$100 million in Net service provider Verio Inc., based in Englewood, Colo., so it can supply users with high-speed Net links. It put another \$100 million in Teligent Inc., a Vienna (Va.)-based firm that’s developing an innovative wireless service to provide speedy data hookups to customers who don’t have access to fiber-optic lines.

Not that NTT is ignoring cost as a means to win customers. IHI Inc., a Tokyo-based manufacturer of heavy equipment such as machinery and aircraft engines, switched its New York

office’s telecom business to NTT cutting its expenses by 20%. Now, Hisakazu Eto, IHI’s corporate secretary and treasurer, is studying whether to shift more U.S. business to NTT. “Their phone service is very good,” says Eto.

The FCC is largely cheering on the arrival of the foreign carriers. The regulators want to promote as many alternatives as possible. “We welcome competition in this country from whoever wants to serve U.S. consumers,” says FCC Chairman William E. Kennard.

But all is not rosy. The FCC is requiring that foreign markets be open to competition before it allows telecom players from those markets into the U.S. What’s more, it wants the costs of international calling to fall—it’s pushing for drops in so-called settlement rates. These are the charges that U.S. callers pay to have a call completed to, say, Mexico or France. They range from 5¢ a minute in Sweden to as high as \$5 a minute in Afghanistan. The FCC has published its own benchmarks for all international settlement rates.

That sort of unilateral regulation doesn’t sit well with some carriers. Telmex, for one, has argued that it needs to keep settlement rates high to fund improvements to its phone network in Mexico, where only 1 in 10 people have phones. It agreed to meet the FCC benchmark of 19¢ a minute in January, 2000, but it wants to keep the rate at 34.5¢ a minute in 1999. On Nov. 24, Kennard called the 1999 rate “unacceptable” and asked that it be reduced.

What happens if Telmex and Mexico refuse to revise their settlement rate? Although it’s the most extreme recourse, the FCC is considering revoking Telmex’ right to offer phone service in the U.S., according to sources at the commission. More likely, Telmex will reach some sort of compromise with the FCC to continue operating in the U.S. That means Telmex’ soccer tournaments—like the benefits of more telecom competition—are likely to continue in the future.

By Peter Elstrom in New York, with Catherine Yang in Washington, D.C.

REVVING UP JAPAN'S ALSO-RANS

Can new ad campaigns jump-start second-tier carmakers?

With Toyota Motor Corp.'s hugely successful Camry line and Honda Motor Co.'s Accord family sedan, the Japanese would seem to have executed a near-perfect infiltration of the U.S. car market. Except for one thing. There's a whole slew of second-tier Japanese carmakers whose fortunes here have been more precarious.

For years, me-too Japanese carmakers, including Nissan, Mazda, and Mitsubishi, have had little to set them apart from one another or from the Toyota and Honda juggernauts, except for this month's hot deal. Now, with their sales free fall, these imports are turning to landing in a big way as they scramble to come up with a distinguishing characteristic other than the ubiquitous rebates, incentives, and low prices. They're ditching their longtime agencies and advertising slogans and launching ambitious campaigns that combine punk-rock undertracks with cutting-edge computer graphics. And instead of price, they're pushing everything from product specialization to styling and performance.

Certainly, new tactics are needed for. For the majority of Japanese carmakers, the once-rat-race U.S. market has become a drain on profits. Detroit's Big Three are catching up to the Japanese in quality and reliability. And in a field of look-alike Japanese vehicles, buyers are flocking to Toyota and Honda. Both have gained more than a point of market share since 1994, with Toyota's sales for the period up 13% and Honda's 19%. Meanwhile, other Japanese producers have seen North American sales slide. Last year, Nissan sales were off 6%

from 1994. The smaller companies are having an even tougher time, with Mazda down 41%, Mitsubishi 18%, Isuzu 22%, and Suzuki off 13% in the important U.S. market. "Toyota and Honda established themselves as the preferred brands," says John P. Wolkonowicz, a consultant at Arthur D. Little Inc. "The others have just been forgotten."

Will the hip new ad campaigns jar car shoppers' memories? Forging an identity requires a product to match an

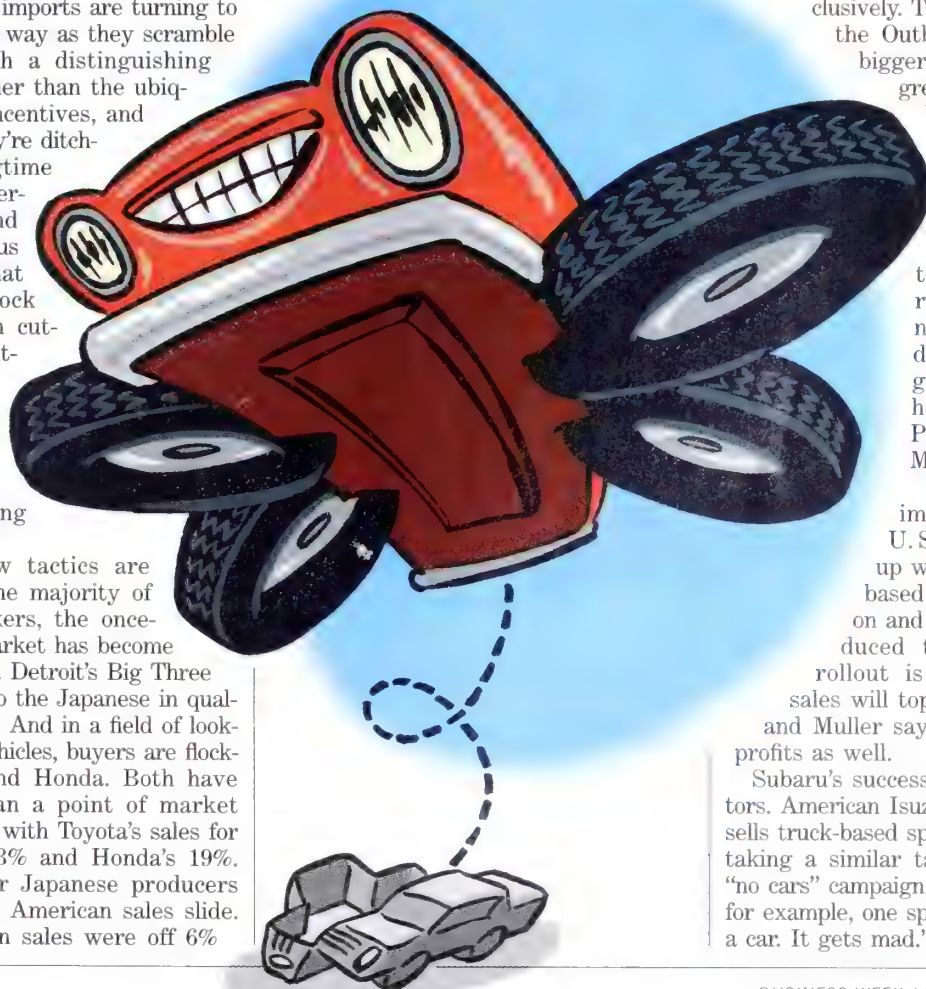
image. But so far, the new commercials seem to be a lot catchier than the cars, which have yet to change. While some companies are seeing improvement, most have yet to come close to recouping years of losses. "If they can't get the package right, even if the brand campaigns are wonderful, they're not going to get anywhere," says Wolkonowicz.

The stampede into branding by the second-tier Japanese car companies was sparked by the remarkable success in the mid-'90s of Subaru of America Inc., a perennial laggard, which put itself into high gear with a revamped car lineup backed by a smart branding campaign. In 1992, the subsidiary of Japan's Fuji Heavy Industries Ltd. was bleeding \$20 million a month in the U.S. Even a \$2,000 rebate wasn't enough to lure buyers for its Legacy sedans. Although Subaru had long offered all-wheel-drive cars in the U.S., it had never emphasized the feature in its marketing.

THANKS, MATE. Finally, in 1992, with the sport-utility craze in full swing, Subaru made a gutsy decision: It dropped all of its front-wheel-drive cars in favor of all-wheel-drive models exclusively. Then, in 1995, it added the Outback, a Legacy with bigger tires and more aggressive styling. Subaru backed up the move with a splashy ad campaign featuring Paul Hogan, of *Crocodile Dundee* fame, to establish the brand as a rugged, off-road alternative to a truck. "We decided we weren't going to fight head to head," says Subaru President George T. Muller.

The Outback was an immediate hit in the U.S. Subaru followed it up with a smaller version based on its Impreza wagon and more recently, introduced the Forrester. The rollout is working: Subaru's sales will top \$3 billion this year, and Muller says it will post record profits as well.

Subaru's success has spawned imitators. American Isuzu Motors Inc., which sells truck-based sport-utility vehicles, is taking a similar tack with its current "no cars" campaign. Of the Isuzu Rodeo, for example, one spot says: "Don't call it a car. It gets mad." But it faces a much



more crowded field. Its Trooper goes head to head with Ford Motor Co.'s Explorer and Toyota's Land Cruiser. The company has also dropped its longtime sponsorship of the Isuzu Celebrity Golf Challenge in Lake Tahoe to focus exclusively on such high-performance endurance sports as the Tour de France and the Ironman Triathlon. Through October, sales are up 8% over last year. "High performance and personal achievement translate into those sports," says Marketing Vice-President Joseph L. Fellona. "We want to take that image as ours."

But for carmakers with a broader product line, staking out a unique image is a tougher proposition. Nissan has become a poster child of sorts for the car-advertising industry. It was first to take a huge, half-billion-dollar step into branding with a quirky campaign two years ago starring an enigmatic Japanese character, Mr. K. The ads attempted to portray Nissan as a slightly hipper car company. But consumers failed to respond, and dealers rebelled. The company has retreated to safe but wordy print ads and a TV campaign that emphasizes performance. "The brand campaign brought us likability, but it did not focus on our products," says a Nissan vice-president, Michael J. Seergy. As a result, Nissan found itself mired in the same old price-war game. "In the long run, it hurt us," says Seergy.

PRICE-DRIVEN. Nissan's failure has not deterred Mazda Motor of America in Irvine, Calif., which has entered the branding fray this year. The carmaker last fall hired Southfield (Mich.)-based W.B. Doner & Co., known for quirky, humorous advertising, to manage its \$320 million annual ad budget, replacing Foote Cone & Belding, its agency of 24 years. Doner came up with the new Mazda slogan "Get in. Be moved," which it used to successfully launch the new Miata this spring. Now, it's using

the same tag line for the new Protegé, a subcompact targeted to twenty-something professional women. The ads, aimed at Generation X, use a soundtrack based on the tune of The Nails' '80s hit *88 Lines About 44 Women*. U.S. sales are up, but Mazda officials

Calif., asks: "By what? It's a very strong idea, but unfortunately, the only car in Mazda's lineup that remotely moves the emotions is the Miata." Car makers are trying to remedy that problem. Mazda plans its first SUV next year. Meanwhile, Nissan is tinkering with a

updated version of its sports car. "Nothing will improve until we produce some good vehicles," says Yoshikazu Hanawa, president of Nissan Motor Co.

X FACTOR. Japanese car makers are also hampered in their branding efforts by one of the groups they're targeting. Toyota and Honda have successfully bred loyalty among the baby boomers. Many of the new ads from the Japanese carmakers target Generation X—a demographic uniquely resistant to image advertising. Subaru, for all its success selling the Outback, had a huge misfire in the early '90s when it attempted to woo Gen Xers with an ad featuring a young man comparing his car to punk rock. Already, critics have panned the Mazda Protegé ad as too obvious to appeal to this generation of marketing cynics. "Don't try to be what you aren't: the message Generation X tells us," says Brown.

All this leaves the Japanese carmakers battling a formidable roadblock: consumer habit. For the better part of a decade, car buyers have turned to Toyota and Honda for quality and the rest of the Japanese

field for a good deal. Janet Babbitt, for example, picked up her '99 Mazda Miata from a New Jersey dealer right after Thanksgiving. Why Mazda? She points to the sleek styling and sport handling, but the bottom line is the "We got a terrific interest rate: 3.9%." Carmakers are going to have to give consumers what they want: cars that appeal to their minds as well as their hearts.

By Larry Armstrong in Los Angeles

CARS IN SEARCH OF PERSONALITIES



ISUZU Desperately seeking extreme sports fanatics. Event sponsorships such as the Eco Challenge and Ironman Triathlon bolster ads featuring rock climbers and snarling wolves.

MITSUBISHI For yuppies who still think young. Hip-sounding score paired with such comments as "No one will ever notice the baby seat."



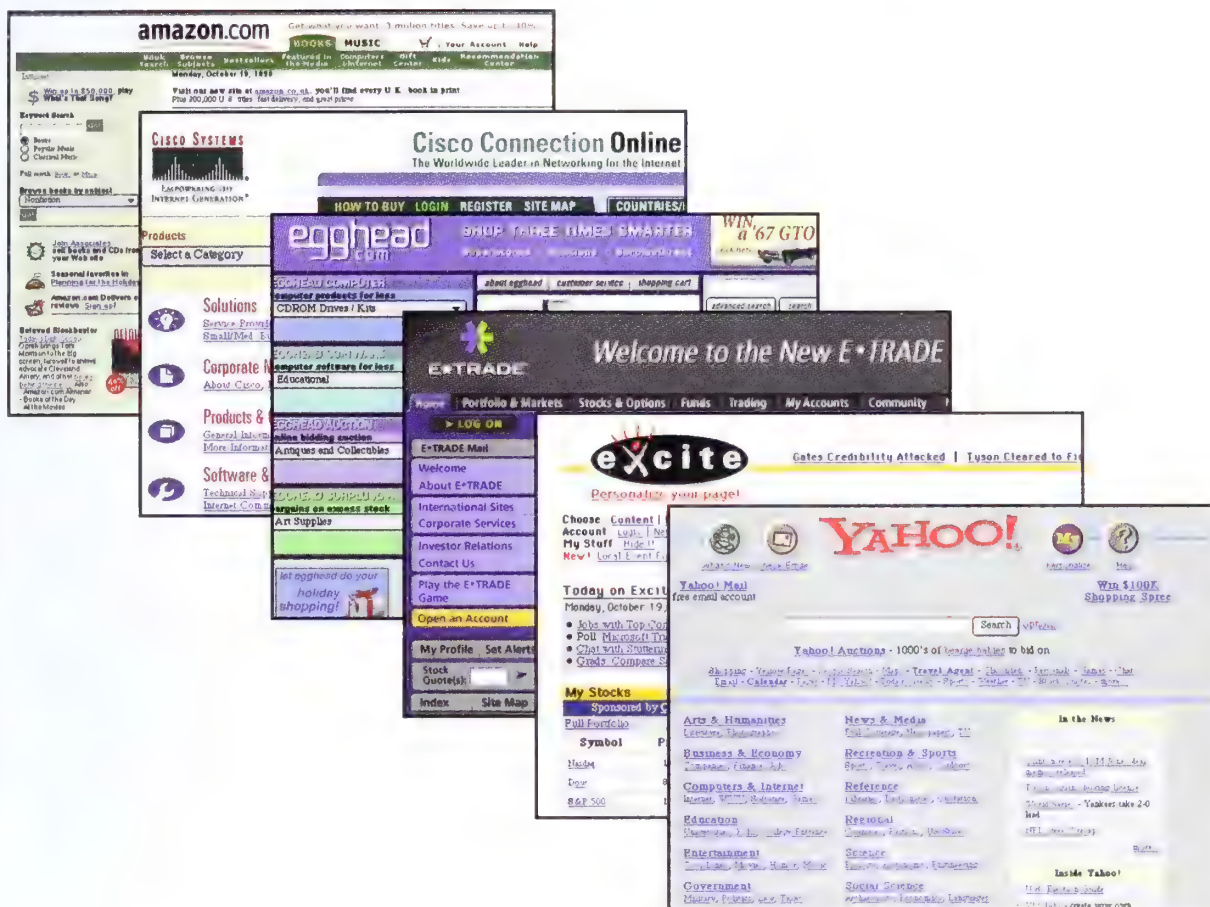
MAZDA Driving straight for Gen X. Jumpy ads combine animation and live action with an updated rock soundtrack peppered with cyberslang. Fans can visit the characters at the Mazda Web site.

say price is still the key driver. "Everyone in this industry is still focused on the deal," says Richard N. Beattie, CEO for Mazda North American Operations.

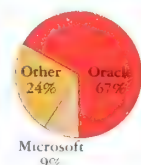
Why aren't the new ads working? Car experts say the problem is the cars. The trouble with all the new high-concept ads is that the message doesn't always match the machine. Citing Mazda's current "Get in. Be moved," Wesley R. Brown, an analyst at market researcher Nextrend in Thousand Oaks,

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HOW NORDICTRACK LOST ITS FOOTING

An infomercial pioneer's fast ride from mega-sales to Chapter 11

Not so long ago, an insomniac could barely get through a late-night channel surf without running into an ad for NordicTrack. And the saturation-ad strategy worked. By 1993, sales of its cross-country-ski machines were heading toward \$500 million a year. By last October, NordicTrack was in Chapter 11. In this day of bulging bellies and short attention spans, fitness machines come and go like so many post-holiday diets. But how did this pioneer of infomercials fall so far so fast?

For starters, NordicTrack was a victim of its machine's durability. Lots of golfers and tennis players, for example, never stop looking for a longer-driving club or a racquet with a sweeter spot. But once you have a NordicTrack, you never need another one. In an industry in which impulse buyers seek get-thin-quick solutions, NordicTrack got hammered by a barrage of contraptions to flatten stomachs and harden thighs.

NordicTrack's somewhat complicated machine cost an average of \$599, hundreds of dollars more than many of its rivals. Requiring coordinated movement of the arms and legs, it pushed users harder than the less daunting treadmill, whose sales have recently been revived by aging baby boomers. Besides all that, management fumbled an expansion into retail. "We weren't as nimble as we should have been," says NordicTrack Inc. President William E. Shepard with some understatement. Shepard, who was sent in by CML three months ago, is dismantling its nearly empty Chaska (Minn.) headquarters, which once housed 400 workers. It's now down to 25.

PALTRY BID. From a peak of \$477 million in 1993, NordicTrack sales slid to \$267 million in 1997, a 44% decline. Over the past three years, NordicTrack posted nearly \$217 million in operating losses for its parent, CML Group Inc. in Acton, Mass. CML also owns the Smith & Hawken gardening-products catalog and retail stores, which turned a



small profit this year. One measure of NordicTrack's descent came on Nov. 30, when ICON Health & Fitness Inc., the Utah-based owner of brands like Weider weight-training products and the HealthRider aerobic machine, offered a paltry \$6.6 million to the bankruptcy court, mostly to use NordicTrack's well-known brand name.

Still, compared with most exercise gizmos,



"We need what Volkswagen did," says the president. "We need our own new Beetle"

NORDICTRACK'S WILLIAM SHEPARD

NordicTrack was a marathoner in the billion-a-year market for fitness machines. Started in a basement by Minnesota inventor Ed Pauls in 1976, the company rode the first wave of the fitness boom and quickly made a name with innovative direct marketing, pirated ads, and an 800 number. By 1986, aided by a spike in cross-country skiing, Pauls sold out to CML for \$22 million. Growth was meteoric.

By the time NordicTrack peaked in 1993, the home-fitness biz was diversifying and newcomers, such as abdominal tighteners and aerobic riders, were stealing NordicTrack's advertorial tris. As the competition intensified and the costs of making commercials rose, NordicTrack strayed from direct marketing. It moved into traditional retail, setting up 125 permanent stores in high-

HEADY DAYS:

Tennis pros Chris Evert and Andy Mill talked up the machines in 1996

rent shopping malls across the country and 100 mall-based kiosks during the November-to-February eat-too-much

holiday season. The stores, small and carrying only NordicTrack machines, offered little room for customers to try out the equipment. And those who wanted to carry home their new machine had to wait for it to be shipped.

HOME RUNNERS. That clumsy expansion was "an invitation for disaster," says Gregg Hartley, executive director of the Fitness Products Council, the industry trade association. But Shepard believes that NordicTrack can resuscitate itself at the mid-to-upper end of the home-fitness market by changing its retail approach. ICON, for example, sells its products at places like Sears, Roebuck & Co. and Sam's Club. "We need what Volkswagen did," Shepard says. "We need our own new Beetle."

Maybe, but the only fitness machine with any staying power seems to be the treadmill, with about \$2 billion worth sold at retail outlets last year. "The people who are turning 45 are the ones who started the running phenomenon 20 years ago," says Tom Doyle, research vice-president for the National Sporting Goods Assn. So these days, says Doyle, they're jogging in their rec rooms between taking the kids to soccer, sweating it out on the stationary bicycle, or huffing through weight training on a home gym. Sales of both bikes and gyms were up 15% a year. That's another reason why NordicTrack looks like roadkill on the baby boomers' fickle highway.

By Jay Weiner in Minneapolis

capitalizing on
DIVERSITY:
Navigating the seas of the multicultural workforce and workplace

*"We have an opportunity to treat culture as a knowledge structure
rather than as emotional resonance."*

—Anna Duran
President, The Duran Group

"Around here, our skin may be
different colors,
but our blood is all the same. Brown."



Hugo Paredes,
UPS Southeast Texas District Manager



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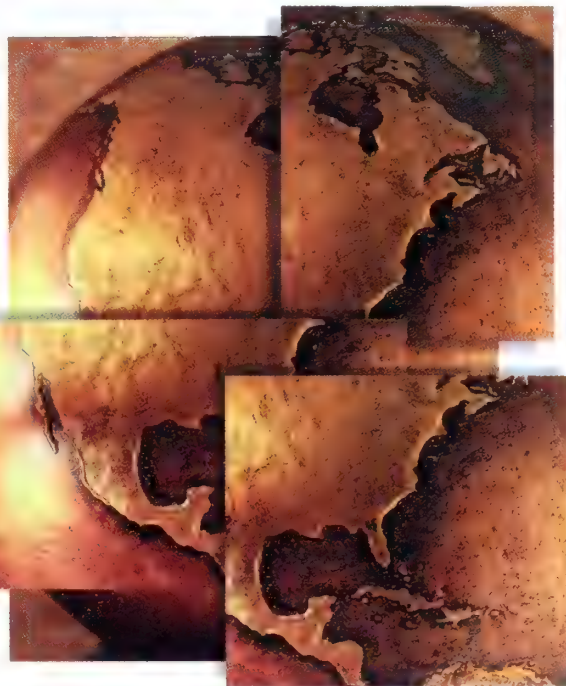
capitalizing on

DIVERSITY:

Navigating the seas of the multicultural workforce and workplace

BY MICHAEL L. WHEELER

Culture. "It pervades and radiates meanings into every aspect of the enterprise," says Fons Trompenaars in *Riding the Waves of Culture*. Yet, he says, "Culture still seems like a luxury item to most managers."¹ Perhaps because the impact of culture upon our lives, our work, is still greatly misunderstood, we fail to see how it might be leveraged for organizational effectiveness and success. But, in our increasingly global economy and growing diverse workforce, we cannot ignore this reality. Director of Global Diversity at EDS, Courtland Burton, asserts, "We must be familiar with different cultural landscapes around the world and how they affect the way business is conducted. Our success is contingent upon it." IBM, too, has identified cultural awareness/acceptance as one of its global workforce diversity challenges among their key regions around the world. J.T. Childs, Jr., vice-president of global diversity at IBM explains: "Workforce diversity is the bridge between the workplace and the marketplace. And, it is anchored on ideals that guide how you see citizens of all countries as potential customers."



The Impact of Culture

Culture is real, it affects everything we do as people and organizations, and we must understand how to make the best of what it can offer. Elizabeth Pathy-Salett, president of the National Multicultural Institute notes that, "As our nation becomes more culturally diverse, we are presented with a series of opportunities and challenges for the future. Can we capitalize on the strength that emanates from our differences? Can we create a work environment that draws upon the talents of all our workers? Can we attract a diverse market, serving a variety of tastes and interests? Our ability to meet these challenges will have an enormous impact on worker productivity, management strategies, and organizational success." Gary Ransom, senior vice-president, Forum

Europe Limited, explains the impact of culture with caution: "Many companies overestimate the probable effect of cultural differences. For example, whenever a global company introduces a new product, strategy, or operating procedure, several managers are sure to declare: 'It won't work in my territory.' Sometimes they are right. But often they are merely saying the safest thing when they feel neither ownership for, nor confident in the strategy devised by corporate headquarters....Other times, the same companies underestimate the importance of local cultures. They assume that a strategy, product, or approach that succeeds in one culture will work in all cultures...." Ransom concludes: "The global companies that over- or underestimate cultural differences are not

naïve. They often realize that they are about to misjudge the impact of culture on their business strategy. But, in the absence of practical alternatives, they press ahead and hope for the best."²

Ransom's statement indicates that, indeed, culture is a business issue and concern that affects products, strategy, operating procedures, and management. It is laden with assumptions about barriers and opportunities—real or perceived—about what we think we can or cannot do. It implies a nebulous concept laden with complexity. His statement reflects corporate attempts to move ahead across cultural boundaries despite clear knowledge

of how to do it best. And, it recognizes companies and individuals who are making a concerted effort to minimize misunderstanding and maximize opportunity.

What is culture?

At Harvard Pilgrim Healthcare, where cultural competence is considered a critical business issue, culture is defined as "the conscious and unconscious, shared patterns of thinking, feeling, and behaving, handed down from one generation to another, that give identity and make life meaningful to a group of people. It is expressed as the collective values, norms, traditions, myths, institutions, and other social and physical phenomenon that are characteristic among members of a group." Deepak Sethi, former assistant director of executive education at AT&T adds: "Culture defines people,

1. Trompenaars, Fons, *Riding the Waves of Culture: Understanding Diversity in Global Business*, Irwin Professional Publishing, 1994

2. Ransom, Gary, "Balancing Global Strategy with Local Cultures," *Forum Issues Focus*, a brief, The Forum Corporation, 1995

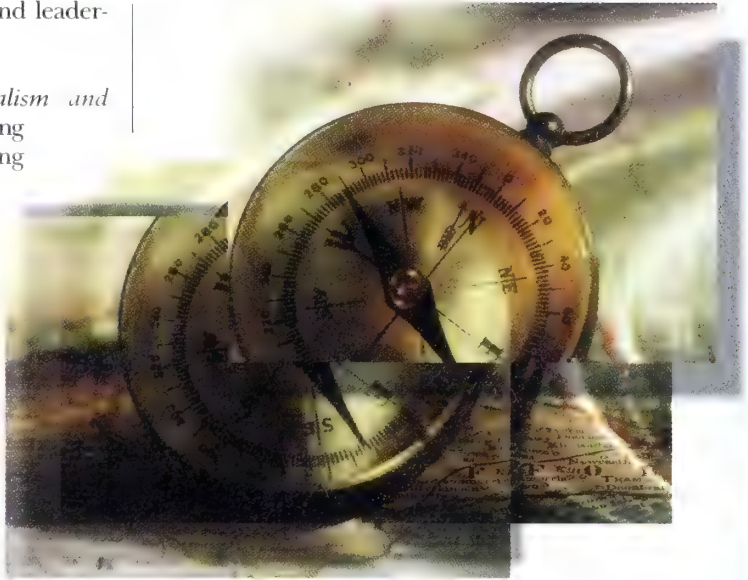
context, aspirations, human relationships, and leadership—virtually every aspect of business.”

Gerald W. Scully, author of *Multiculturalism and Economic Growth* notes, “...cultural programming specifies rules for acquiring and transferring information. It standardizes perceptions. It also defines attitudes for intra-group relationships and for dealing with nonmembers. And, it sets the institutional parameters that condition human behavior and stabilize social systems. Culture standardizes relationships, so that people need not be constantly mindful of the implication of their behavior. They can make reasonably confident assumptions about the reactions of those with whom they interact. From the economist’s perspective, culture reduces transaction costs. The codes for interpreting external information, attaching values and priorities to that information, classifying forms of potential behavior as acceptable or not, and perceiving social rank are all passed from one generation to the next through a system of reward and punishment.”³

In the workplace, where common culture is often shared, it makes communication, understanding, predictability, and general day-to-day interactions much easier—it reduces “transaction costs.” But, as Anna Duran, president, Duran Group points out: “With different cultural systems in place we are faced with increased opportunities for being socially inappropriate or maladaptive—or for getting it wrong. Essentially, our lack of practice with different cultural systems and the kind of behaviors that coincide with these systems produces the conditions we fear most.” Nonetheless, both our domestic and global diversity realities have introduced new layers of cultural complexity that increase the opportunity for misunderstanding, unpredictability, and conflict. And, it is often in conflict where culture becomes most evident.

Culture Clash

As many as half of all nations have experienced or are experiencing substantial cultural conflict in the second half of this century notes Scully: “Ethnic tensions, religious conflict, racial friction, and linguistic differences have arisen. They have made nation-building and inter-group cooperation quite difficult. When societies are multicultural the “ethnocentric differences often lead to enmity in many forms....”⁴ Conflict is real, and this underlying source of tension must be dealt with on a variety of levels within organizations. We see conflict most apparently in the United States workplace in racism, gender gaps, homophobia, and other issues of difference and inequity. It is in this arena where corpo-



rations often feel the most pain, and see the greatest costs—especially in turnover, absenteeism, low morale and productivity, and litigation.

Because conflict is often the most visible and immediate concern, we find it difficult to look beyond the struggles and see where cultural differences can provide opportunity, innovation, and problem solving.

The Cultural Iceberg: Imminent Danger or Hidden Opportunity?

Icebergs can sink ships. The recently popularized movie *Titanic* paints a graphic image in our minds of the great, “unsinkable” ship. It wasn’t a forceful gash that sank the ship, but the ice beneath the water that sheared rivets off the hull, allowing the ship to take on water. A weakened hull led to a fast-sinking ship. It might be said that corporations face similar dangers. The signs are there.

The tip of our corporate “iceberg” is globalism, technology, diversity, values, assumptions, different faces and ways of doing things. What lies underneath are hidden challenges of lost talent, inequities, and the unknown. The signals, the warnings, are often not seen or heard until it is too late and the damage is done. Better navigational systems help modern-day ships avoid such tragedies. We can see the tip of the iceberg as a sign of imminent danger, or, we can see within it a wealth of hidden opportunity that just needs to be brought to the surface. Corporations can improve their navigational systems to chart the waters of the increasingly diverse workplace, markets, and world and discover the hidden opportunities through their corporate diversity strategies.

³ Scully, Gerald W., *Multiculturalism and Economic Growth*, NCPA Policy Report No. 196, August 1995, ISBN #1-56808-061-1

⁴ Scully

Aligning Corporate Culture with a Multicultural World

The challenge for corporations is "redefining themselves because they have already been redefined by the economy," says Pamela Palanque-North, president of Palanque Associates. Many U.S. corporations are discovering traditional practices and values inherent in organizational cultures are no longer in-sync with changing realities. Corporations need to create alignment between their corporate culture and a multicultural world. They need to build upon what they do well, and identify the gaps in their systems, policies, procedures, and practices that inhibit the organization's ability to compete effectively. Duran explains, "If we allow ourselves to break away from some (but not necessarily all) of our traditional core values of the organization, we should become more innovative and productive. One of the ways to do so is to create new cultures (and thus value systems)."

While corporate culture can be "one of the things that makes an organization successful," says Sharon Parker, president, The Institute for Managing Diversity, "it can also limit success by things

City University New York. He explains, "Cultural values are expressed at a societal level. Organizations and institutions within that system do the same and set up a value system reflecting that society. With a diverse workforce, you find people sharing physical or psychological space where people tend to want each other to assimilate. Value clashes and conflict can come about from individual, institutional, and cultural interpretations of traditional practices." Maria Thacker of International Orientation Resources adds, "Most of the 'appropriate' behaviors that our group tries to drum into us (socialization) are internalized assumptions and values cast as right or wrong."

Claire B. Halverson, Ph.D. president of Halverson Associates provides additional insight: "Perceptions of differences are sometimes based on prejudice and not reality. At other times there are real differences due to cultural backgrounds. In these latter cases, there is a problem because the organizational policies, practices, and norms have usually been established and maintained by those in power in the organization. In most organizations in the U.S., Euro-American men have had this power. This can have a negative impact. Biases,



that may be culturally bound." For example, cultural boundaries can prevent organizations from fully tapping their talent by excluding people who are different. Alan Reich, president of the National Organization on Disability remembers a time when corporate culture was such that disabilities were unknown. Today, he says, "There is a whole new phenomenon with 54 million members of the disability world. Companies have realized with little investment there can be a great gain to accommodating individuals with disabilities." We also can look at other groups of people who have traditionally been excluded and recognize the tremendous contributions they are making to business and society.

Why Do We Exclude? A Cultural and Historical Context of Corporate Culture: Society makes its "own set of assumptions about how members should act," says Anderson J. Franklin, Ph.D., professor of Psychology at

prejudices, and perceived differences negatively impact those who are not in a position of power in the organization. This usually reflects societal issues of racism, sexism, and cultural ethnocentrism...effectiveness depends on how differences and perceptions of differences are managed."⁵

Trevor Wilson, in his book, *Diversity at Work* also makes us aware of some of the subtle, culturally laden, yet sometimes unintentional forms of discrimination (this does not exclude the facts of intentional discrimination) existing in many of our corporations: Some examples include seniority, entitlement, inflexible systems, the Old Boys' Network and non-bona fide job requirements and corporate culture "fit."⁶ Mary McCrae, associate professor of applied psychology at New York University explains that, "We have to be able to talk about these issues and understand there is individual, institutional, and cultural barriers to people. We need to learn about

5. Halverson, Claire, "Managing Differences on Multicultural Teams," *Cultural Diversity at Work*, May 1992 (4:5)

6. Wilson, Trevor, *Diversity at Work: The Business Case for Equity*, John Wiley & Sons, 1997

exclusion in terms of our own cultural environment and look for ways to overcome the barriers."

Our Failure to Maximize Talent:

Because culture often divides, because we place real or artificial boundaries between us and others—or our organizations create boundaries—we limit access and that prevents organizations from maximizing talent and from maximizing productivity.

Rod Brown, president of Re-versity, explains, "Too many companies are underutilizing a tremendous part of the asset base they already have." Until now, the whole "management paradigm has been about treating people exactly the same," says Wilson. "Our dealing with multiculturalism creates the requirement of an 'equitable' environment and this means doing things differently from the past." Creating an organizational culture of equitable employment systems that maximize each employee's potential is considered a business imperative critical to customer satisfaction, and increased revenue and profits. Bill Tate, general director, human resources, Powertrain Group of General Motors Corporation concurs, "Our corporations must create a culture of inclusion that leverage the talents of every individual and engage every employee. Accessing talent is a bottom-line business necessity."

When we find ourselves products of our culture and inculturated into a corporate culture that may or may not be inherently biased, we are often not aware of the consequences of such a system. Gwen Houston, director, corporate diversity at Nike acknowledges: "Sometimes corporate cultures are blind to their exclusion of others. We have to recognize that we live in a pluralistic world. Almost every area we touch will involve diversity—from employees, to customers, to suppliers." Understanding cultural context also helps us move from an "us versus them" perspective to a more objective context that can help us look at a system and identify inherent weaknesses and problems (we need diverse perspectives to help us do that). Sharon Parker notes, "One of the advantages of looking at culture and organizational culture is that we move away from the 'you are a bad person' or 'you are racist' or 'you are sexist' perspective. It's about recognizing how the organization limits people and then setting up policies, systems, and procedures that build on diversity and eliminates barriers."

Aligning corporate culture with a multicultural world



helps us to overcome the inherent limitations we might place on people, and our ability to fully leverage intellectual capital. Jay Lucas, of Organizational Transformation Partners, Inc. explains that, "Organizational culture is important because it influences performance capability."

Herein lies a challenge and opportunity to recognize what we do well, to eradicate barriers and cultural biases, and to balance the creative tension. We need to ask ourselves: Do our organizational culture and our values allow us to operate effectively in a diverse world?

What makes us successful? What prevents us from being successful? What can we do to enhance our performance capability?

The Strategic Corporate Challenge



Whether crossing national boundaries, or working in a multi-cultural team at home, "businesses and individuals are under pressure to develop cross-cultural abilities and skills," says Lewis Brown Griggs, president of Griggs Productions and an early pioneer in cross-cultural video training programs. Among those abilities and skills are:

- Building cooperative relationships across cultural and individual differences.
- Understanding and effectively dealing with cultural differences.
- Developing work relationships that have win-win outcomes, despite different cultural dictates and ways of being.
- Recognizing that with differences come discomfort and tension, and that this does not have to lead to fight or flight.
- Recognizing that differences present an opportunity—they are the ingredients that lead to creative and synergistic results.

Corporations influence the world in powerful ways. In the workplace, eradication of institutional biases, modeling for inclusion, and win-win practices can be exhibited. But the difference between a sinking ship and a successful voyage is the application of knowledge through corporate strategies. It is here where companies can minimize conflict, use the tension created by cultural differences to increase innovation and problem solving, heighten employee utilization, improve communication and, indirectly, have a positive impact on business and communities by leveraging cultural differences.



To: All

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Alex Trotman
Alex Trotman
Chairman and CEO

Every employee will attend training to raise awareness and understanding of gender differences in the workplace.

DIVERSITY



MENTTII



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"And great things happen when we work together. We come up with new ideas...like our Spanish language telephone bill for our customers in Florida."

"We assist our customers in eight different languages."

*Alexandra Angra
Multilingual Center*

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Strategy: Aligning Corporate Culture by Effectively Creating, Managing, Valuing, and Leveraging Cultural Diversity

A long-term strategy is critical to ensuring the success, and continuation of this work through systemic culture change. Mario Sinabria, director of education and training at The Institute for Managing Diversity explains, "Setting up policies, practices, and procedures consistent with a multicultural workforce will help you achieve your goals."

The "Notion of Innovation" Include Different Perspectives: We have a "profound opportunity to expand knowledge," says Anna Duran, but to do that, "we must expand and leverage the differences in our knowledge base." Julie O'Mara, president, O'Mara & Associates, suggests, "Respect normal operations, but you have to change the system to change the system. If you keep using old systems, you perpetuate an old system." Roderick Gillum, vice-president, public policy and diversity initiatives at General Motors explains, "As you make change, you have to be sure you have your collective input to ensure you are shifting in the right direction." Palanque-North calls this the "notion of innovation"—getting people who are different at the table to bring in different perspectives and who can help lead you successfully into the future.

Corporations in the United States are leading the world in the establishment of diversity initiatives geared toward equity and inclusion. The very nature of these concepts may clash with some cultures. Although the issues may vary around the world—diversity is a worldwide issue that affects corporations wherever they go. While America's corporations are taking a stand, making a difference, it is imperative they consider the idea of reciprocity when carrying out their initiative. Reciprocity is key to business success and the success of a diversity initiative.

Reciprocity: A Business Opportunity

Duran explains that reciprocity "involves exchanging values when it is best for the overall well-being of the organization." We tend to operate on and reinforce either a personal or organizational value system that may or may not be good for business. Duran tells a story of how reciprocity helped win a \$65 million dollar deal for a company.

"While in Japan, a New York-based investment banker had his notion of working in teams challenged. For him, teaming meant working individually then bringing

individual tasks back to the group. In Japan, this didn't work. In his experience, the Japanese valued collateral-ity and mutuality in every one of the tasks of the work that was done. At first he thought it was a waste of time, but he discovered that their idea of team presented the opportunity to develop relationships. He found knowledge was not placed in individual silos, but transferred among the group. In turn, he had recommended at some point during deal construction that when they ran into a problem, they take 30 minutes individually to think about it then bring it back to the table. When they returned, the team found many new ideas on how to structure the deal. Taking the time to share and reciprocate on some team practices helped land the deal."



Such stories are real, and represent millions, perhaps billions of dollars in everyday business transactions around the world. If we were to take the time and consider all the lost contracts, failed marketing attempts, destroyed relationships, conflicts, lost talent, and misunderstandings, we would find those same losses could often have been profits and successes with a little insight into cultural implications. These wins and losses don't only occur globally, but apply domestically as well. Maria Thacker explains, "In this competitive global market, we need all the synergetic creative approaches we can muster. By being culturally open to other approaches we exponentially increase our options. It is a learned skill to be able to access other's cultures perspective—it doesn't matter if it is your business colleague eight time zones to the West or your neighbor down the street."

Each organization is unique. There is no cookie cutter approach to how to align corporate culture with a multicultural world. But, there is a framework (or frameworks) from which companies can build their own strategy. Patricia Arredondo, author of *Successful Diversity Management Initiatives* provides one "blueprint for

success" for culture change (see Exhibit 1). She explains, "Some processes and tasks should logically precede others, but the model is fluid, encouraging organizations to introduce particular tasks...I propose that leaders and planners adapt the model to their own idiosyncratic needs, priorities, and business."⁷ A report by The Conference Board titled *Corporate Practices in Diversity Measurement* indicates that there are three critical components to an effective diversity strategy: creating a diverse workforce, managing a diverse workforce, and leveraging a diverse workforce. We see how these work in tandem for helping ensure an inclusive work environment where individuals can achieve and contribute to organizational success.

Creating a Diverse Workforce

A key tenet of all diversity initiatives is ensuring the creation of a diverse workforce through recruitment, development, and upward mobility. Most, if not all, corporate initiatives have a strong component geared toward ensuring a visibly diverse workforce, at all levels, with special emphasis on race and gender. Some of this is compliance driven, but corporate diversity initiatives are increasingly being motivated by the reality of an increasingly diverse labor pool and growing market segments of culturally diverse groups as well as the internal organizational inequities and systemic barriers to the progression or access to those groups. Emily Duncan, corporate manager, diversity & work/life at Hewlett-Packard reminds us, "This work is not new. We have been establishing a foundation for years that has helped bring us to where we are now and that will lead us into the future."

Diversity and Inclusion are Not The Same: Keith Kennedy, director of diversity at Hallmark Cards also reminds us, "A diverse organization and an inclusive

organization are not necessarily the same thing. A diverse environment has people at the decision-making table and allows them to participate." Typical EEO1 data and categories, while a useful metric, really do not provide a measurement of cultural diversity in an organization. One executive interviewed commented that, "Most CEOs surround themselves with people who think like them. Many may have people of color or women reporting to them, but they think just like them." We have to ask ourselves, when recruiting or promoting

people of color and women, are we really bringing in diversity, or people who just look different? Are we bringing in diversity of thought? Are we acknowledging the rich cultural heritages that people bring with them? Are we really tapping into the talent that our current women and people of color have to offer? Are we including them and engaging their talent, knowledge, and expertise? Do we allow them to propose a contrary point of view?

Cultural Considerations for Creating a Diverse Workforce: Let's get back to the cultural iceberg for a moment. We might think of the tip of the iceberg from the perspective of typical EEO1 categories. These categories are also often known as the primary dimensions of diversity, and are typically protected groups. Picture headings of, male, female, Black, White, Asian, Hispanic, Native American. These

groupings tell us something, but little in terms of who the individuals are—or sometimes who the group is.

Picture the tip of the iceberg as labeled "Hispanic." What might be below the surface? Consider the thought as presented by Melby and Hochhauser at the 1991 Annual Convention of the American Psychological Association: "One may be classified as Hispanic, but that includes Puerto Ricans, Cubans, Mexican Americans, Salvadorans, Spanish, and others from the Caribbean, Central America, and South American countries.

Exhibit 1

"A Blueprint for Success"



THRIVING IN A MULTICULTURAL ENVIRONMENT

- Multicultural management competencies • Multicultural ambience
- Cross-cultural flexibility, awareness, respect, and adaptation

Planning, evaluation, and clarification are ongoing processes for each phase.

Source: Patricia Arredondo, "Successful Diversity Management Initiatives: A Blueprint for Planning and Implementation."



**SUCCESS IS INSPIRED BY
THE STRENGTHS OF MANY.**



*Top row: Jason Hyatt, Barbara Friedman, Greg A. Dwyer, Thomas J. Donohue
Bottom row: James Wang, Michael A. Feltz, Deborah L. Glick, Robert J. Glick*

The way we see it, everything that makes us unique, makes our work force that much stronger in a diverse world. Our commitment is to create an environment in which the best people do their best work, and that means building a company in which differences are respected and valued. We recognize that this goal is a challenging one, and we know we're not there yet. But our candor is matched only by our determination in reaching this goal—to cultivate a broader base of people whose differences can truly make a difference for our business and our clients.

The right relationship is everything.™



Similarly, one may be classified as an Asian-American/Pacific Islander, but that includes Japanese, Vietnamese, Hmong, Cambodian, Thai, Malaysian, Chinese, Korean, etc. One may be classified as African-American, but that includes people with an ethnic background from Africa, the Caribbean, South America, etc.”⁸ Skip LeFauve, senior vice-president of General Motors University concludes after many years of global work, “Culture goes way beyond national culture. There are many cultures within a nation. It can vary by region, by groupings of people. And, ultimately, it is about the individual.”

As we will discover, groupings and cultural generalizations can be useful and are, to an extent, necessary. An understanding of groups versus the individual becomes particularly relevant in the workplace as we learn to work together, market to people, and attract talent. Citibank, for example, has recognized the complexity of culture and groups and has modified some of their marketing strategies as a consequence. Ana Duarte McCarthy, vice-president, diversity management at Citibank explains, “We have become more sensitive to our marketing approaches recognizing that there are many differences within market’s that have traditionally been viewed as one.”

Defining culture, trying to contain it, manage and understand it may seem overwhelming. In fact, it is manageable, it is understandable, and there are ways to demonstrate how to build bridges across cultural differences and reduce boundaries and limitations—especially in our corporations. We must learn to manage diversity, value it, and leverage it. Managers need to learn to draw out talent, identify systemic problems, and recognize individuals for all they bring to the workplace.

Managing a Diverse Workforce

Diversity is fundamentally a business issue that may be signaling an end to the “one-size-fits all” era of management. But, truth be told, we like to be with people who are like ourselves—it is a natural inclination. It may not be based upon race or gender, but we like those who are like us. This creates a problem for companies when the world around them is changing and their people inside seek to maintain familiarity and stability. Terry

McGuire, director, workforce issues, and executive-in-residence at The Conference Board explains: “People tend not to choose to put themselves outside the comfort zone. If one of your objectives is to give people greater cross-cultural competence, you must force them to step outside their comfort zone. You consciously create opportunities for them to work with people they are not used to working with.”

Self-awareness often becomes an important piece of management training (as well as employee training.) It is a natural inclination to believe one’s own culture is normal and, perhaps, superior. Consequently, other cultures are perceived as inferior, which leads to an ethnocentric way of thinking—in other words, we ignore the distinction between our own culture and another person’s culture. We assume that others will react the way we do and that they will operate from the same assumptions.

Nortel Network’s, vice-president, diversity and work-life strategies, Jack Deere observes, “We are not cognizant of culture most of the time. You have to stop and think about it.” “We have to develop a ‘learner’s mind’ says EDS’ Courtland Burton, “by seeing cultural differences as a developmental opportunity.” Anna Duran concludes, “We need to treat culture as a knowledge structure rather than emotional resonance.”

Cultural Competence: Establishing a Knowledge Structure

Companies like Hewlett-Packard, Harvard Pilgrim Healthcare and IBM consider cultural competence an important (important enough to hold managers accountable with financial incentives) management requirement. Harvard Pilgrim Healthcare’s Vice-President of Diversity Barbara Stern, explains, “Cultural competence should be a part of everyone’s strategy. We need to be good at working with people of all walks of life.” R. Roosevelt Thomas, Jr., founder of The Institute for Managing Diversity and well known author asserts, “Companies that want to compete successfully must hold managers accountable for underutilizing people who are not like them.” He adds, “This has nothing to do with prejudice or guilt. Managers must perform their role or be removed to another area where they can be effective. Understanding differences helps



8. Melby, Bernette A., Hochhauser, Ph.D., “Cultural Diversity Training: Education, Ethics and Evaluation” Presented at the 99th Annual Convention of the American Psychological Association, San Francisco, CA August 19, 1991 3-4 30 p.m.)

DECLARATION OF DIVERSITY

We, the undersigned, believe that the communities, citizens and corporations of New Jersey will reach their highest goals when all appreciate and celebrate the state's growing diversity. As members of The Partnership for New Jersey or major employers, we know that New Jersey's growing diversity strengthens corporations and communities alike.

When we strive in the work place to reduce bigotry and prejudice, the effort to recognize the full potential of an increasingly diverse work force begins to succeed. The principles that underlie successful corporate efforts can help guide New Jersey's progress toward becoming a state that truly values diversity. We are committed to the following principles and invite other employers, cities and towns, and individuals throughout the state to join us in taking concerted action to

- ACKNOWLEDGE AND RESPECT DIFFERENCES
- BE SENSITIVE TO THE MANY CULTURES IN AND BEYOND THE WORK PLACE
- AVOID CONDUCT THAT DISADVANTAGES ANY GROUP
- UNDERSTAND AND SERVE FAIRLY THE DIVERSE COMMUNITIES IN WHICH WE OPERATE
- ENCOURAGE POLICIES AND PRACTICES THAT ARE TRULY INCLUSIVE
- EMBRACE OPPORTUNITIES TO WORK WITH OUR COMMUNITIES TO DEEPEN AND BROADEN OUR MUTUAL UNDERSTANDING ABOUT DIVERSITY ISSUES.

Martin Bartner

Martin Bartner
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The Star Ledger

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The Partnership for New Jersey invites others to join in this continuing commitment, that grew out of the Governor's Leadership Summit on Diversity, October 2, 1996. For more information, please call or write The Partnership at 109 Church Street, New Brunswick, NJ 08901, 732-246-3222.

the valuing and confidently promoting a diversity of new ideas and workforce. For communication, managers are encouraged to demonstrate sensitivity to language and cultural communication requirements.

Conflict Management for Creative Tension: A Critical Competence: Cross-cultural encounters are bound to lead to conflict. According to Evans, three areas of miscommunication are likely to lead to this conflict: values, perceptions, and assumptions. She explains, "Managing conflict constructively requires checking assumptions, finding common ground, and generating solutions." Frank J. Quevedo, vice-president, Southern California Edison, adds, "We have tremendous opportunity to provide managers with basic conflict resolution skills. This is their reality, they need tools to manage across those differences effectively." When conflict can be thought of as an opportunity for creative tension, we begin to see a basis for better decision-making, more creative ideas, solutions to problems, and improved communication and interpersonal relationships.

Success was evidenced for Mercedes-Benz at their plant in Tuscaloosa, Alabama. The Americans found that their styles for addressing issues differed from Germans and vice versa. Debra Nelson, administrator of external affairs at Mercedes-Benz U.S. International says, "We knew we would be engaging Alabamians, Germans, and people throughout North America as well as the 'Big Three.'" She adds, "It has taken a lot of work, including cross-cultural understanding and awareness, to help us be productive. The work has paid off. We learned communication was the key. Through communication we discovered our commonalities."

Developing cultural competence takes work and education, but is well worth the investment. Sondra Theiederman, author of *Bridging Cultural Barriers for Corporate Success* writes that learning about cross-cultural management is important because it will "allow you to maximize the chances that your multicultural workplace will be productive, efficient, and harmonious. It will also enable you to attract and retain high-quality workers of diverse ethnic or cultural backgrounds." Specifically, she notes, it will allow:

• A common understanding of the cultural differences that may exist between the various cultural groups in the organization and the ability to communicate across these differences.

• The ability to understand and appreciate the cultural differences that may exist between the various cultural groups in the organization and the ability to communicate across these differences.

Harmony and comfort in the workplace through an understanding of the motivations and perspectives of others.

individuals learn how to get along." In essence, cultural competence and strong diversity management will help companies effectively draw upon talent, intellectual capital, and motivate more employees.

What Does Cultural Competence Look Like?: Alan Richter, partner at QED Consulting and creator of The Global Diversity Game, explains, "One dimension of cultural competence is the ability to deal with ambiguity. The more you deal with it the more effective you can be—it's adaptive. Dealing with complexity is another skill. From a cultural perspective, it might be the ability to switch between cultural paradigms." Deborah Dagit, Silicon Graphic's director of diversity adds: "Cultural competence is knowing what I don't know and learning to understand what other's expectations are. You have to ask questions to be on the same page." Sybil Evans, author of *Resolving Conflict in a Diverse Workplace* and conflict management expert, adds, "a critical skill is the ability to see issues from another person's perspective. Although it is a mistake to claim total identification with someone of a different culture, one can empathize with the person's feelings and communicate recognition, respect, and caring. Enhancing questions, listening and responding skills is essential to demonstrate this understanding."

At Ford Motor Company, leadership behaviors have been identified as they have integrated leadership assessment into performance management. Among the behaviors management are assessed on are: integrity, courage, durability, people development, teamwork, communications, drive for results, systemic thinking, and business acumen. Culture is integrated into these behaviors. For example, people development involves

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Melissa Martinez

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Moreover, cross-cultural management minimizes:

Worker alienation that can result from misunderstandings of etiquette, values, and behaviors.

Costly discrimination suits that arise from poor communication and worker alienation.

Unnecessary terminations that result from communication breakdown and misinterpretation of employee behavior.

Your managers' reluctance to hire and work with culturally diverse workers.

Racism and discrimination that can result from misinterpretations of the behaviors of others."⁹

Sometimes culture-specific training is necessary, but there is also culture-general training which can be valuable and particularly useful for developing cross-cultural competence.

Culture-Specific and Cultural-General Training:

A book entitled *Kiss, Bow or Shake Hands: How to Do Business in Sixty Countries* is an excellent resource for understanding culture-specific issues. This resource is the basis for many corporate training programs, especially as they pertain to expatriates who are being trained to go abroad. Authors of the book, Morrison, Conaway, and Borden, explain that for each of the sixty countries identified in their book, there is a "cultural orientation" that includes:

- Cognitive Styles: *How We Organize and Process Information*
- Negotiation Strategies: *What We Accept as Evidence*
- Value Systems: *The Basis for Behavior*
- 1) Locus of Decision-making
- 2) Sources of Anxiety Reduction
- 3) Issues of Equality/Inequality¹⁰

These cultural orientations help us understand in a business context how people may vary in their perspectives and ways of doing things based upon their cultural orientation. Again, we are reminded by Morrison, et. al., who caution individuals using their book, "Remember that you deal with individuals, and there are always exceptions to every rule."

Drawing upon cultural orientations and cultural archetypes, American Express Financial Advisors has also developed a very successful form of culture-specific training. Through training and participation in Learning Labs, American Express Financial Advisors is actually increasing the understanding, and the valuing, of their diverse constituencies. This method has had

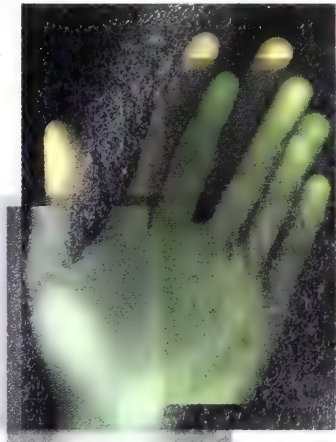
phenomenal success in tapping into the African-American, Hispanic, and Gay and Lesbian markets. Richard S. Gaskins, vice-president, diversity resource center at American Express Financial Advisors concludes from his experience: "In order for people to be effective in diverse client acquisition, certain things must be in place. They must have a knowledge base of cultural patterns of the segments they are working in. The organization must also support this kind of environment. And, senior management must support and appreciate the fact that people are different. We teach people to effectively communicate and work with people who are different from themselves."

Culture General: A Taxonomy for Understanding World View

Culture is complex, but it "embodies a way of living, of seeing the world," says Arredondo. "When viewed this way, we can begin to connect as individuals and as groups." Research by Arredondo and others such as Nancy Adler, Geert Hofstede, Edward Hall, Fons Trompennars, Warner Burke, Taylor Cox, and Kluckhohn and Strodbeck, among others provide us with valuable insight into understanding culture and cross-cultural differences. Anna Duran, based upon the work of Kluckhohn and Strodbeck, and Farah Ibrahim, Ph.D., professor at the University of Connecticut and developer of the Scale to Assess World View, explains that each of us maintains our own "World View" around five key areas:

- Human Nature: What is the character of human nature?*
- Relationships: How do people establish relationships?*
- Nature: What is the relationship of people to nature?*
- Time: Where is the temporal focus of life?*
- Activity: How do people live their lives?*

As an example, our world view on "human nature" might manifest itself in the workplace in a variety of ways. One kind of conflict that occurs within this value category, according to Duran, is how much to trust people or not. She explains, "These conflicts manifest themselves in terms of how much of our work we share with other people, how much we trust co-workers or subordinates to carry through with a project; and how much we allow a



9. Thiederman, Sondra, Ph.D., "Bridging Cultural Barriers for Corporate Success," Lexington Books, 1991

10. Morrison, Terri, Conaway, Wayne A., Borden, George, Ph.D., *Kiss, Bow or Shake Hands: How to Do Business in Sixty Countries*, Adams Media Corporation, Holbrook, MA, 1994

group to empower themselves to develop policies and procedures for the organization or allow people to make decisions for themselves."

Griggs Productions has also provided a similar example of common challenges people face across differences in the workplace (see Exhibit 2). We see readily how contrasts around time, language, communication, and relationship can have significant consequences in the workplace.

Exhibit 2 Culture Contrasts

The time challenge: *pace; time is money; past-, present-, or future-oriented; fixed versus fluid (In some cultures there is no language regarding time.)*

The language challenge: *is the culture relying on language, action, or intuition to make judgements?*

The life goal challenge: *harmony; goal-oriented; short term/long term; approach to basic needs (scarcity-plenty).*

The communication challenge: *direct versus indirect; verbal versus nonverbal; meaning is derived from high context versus low context; circular versus linear; formal versus informal; expressive versus stoic.*

The work and activity challenge: *if there is a will, there is a way; long versus short hours; family and work balance; live to work/work to live; being versus doing; task versus relationship; order versus flexibility.*

The use of space challenge: *different physical and psychological space; private or public; near or far; closed or open.*

The power challenge: *who is in charge? Hierarchical; participative; patriarchal; equality.*

The relationship challenge: *differences in building and maintaining relationships (family, organization, church, state, etc.); formal versus informal; individual versus the group; cooperative versus competitive; task versus relationship.*

The challenge of how to relate to oneself: *as individual versus as part of a group; as critic or as nurturer; as body, soul, or mind; as spiritual; as integrated whole.*

The spirituality challenge: *god-fearing; agnostic; atheist; the notion of good versus bad; varying religions.*

The nature and environment challenge: *part of nature versus control of nature.*

Source: Griggs Productions, *Human Energy at Work, Global Contrasts*, 1996, San Francisco

A Taxonomy on Personal Culture: Jane Kendall, director of the Leadership Center at The New School for Social Research explains: "Our orientation to the world is where we draw our energy from. It affects how we perceive the world and gather information. It is how

we make decisions or what we perceive." Based upon the Myers Briggs Type Indicator, Kendall believes "we can better understand our orientation through things like extraversion and introversion, sensing or intuitive types. We find these concepts put forth by the MBTI is an excellent tool that crosses cultures to help us understand 'personal culture' and enhance management and relationship building." Kendall notes that

although the MBTI can be culturally influenced, type preferences are innate. She explains type preferences serve as a foundation, that we are capable of using behaviors that are not innate, and that there is no right or wrong type—just different styles. She adds: "In collectivistic, and highly ordered

cultures, it may be complex to identify type and to allow the individual personal

freedom to express and use personal preferences."

Kendall makes an interesting point. Simple ways in which we view the world and how our world shapes us can have significant impact on how we communicate, motivate, and manage success. For example, one common misunderstanding that occurs between American and others in the world is that between an individualistic perspective and that of a collectivist perspective. Albert J. Jaramillo, managing partner of Workplace International explains these differences in terms of performance evaluation: "In the U.S., we are typically individualistic in performance evaluations. We think that a person succeeds or doesn't succeed based upon their own individual set of talents. In some other cultures



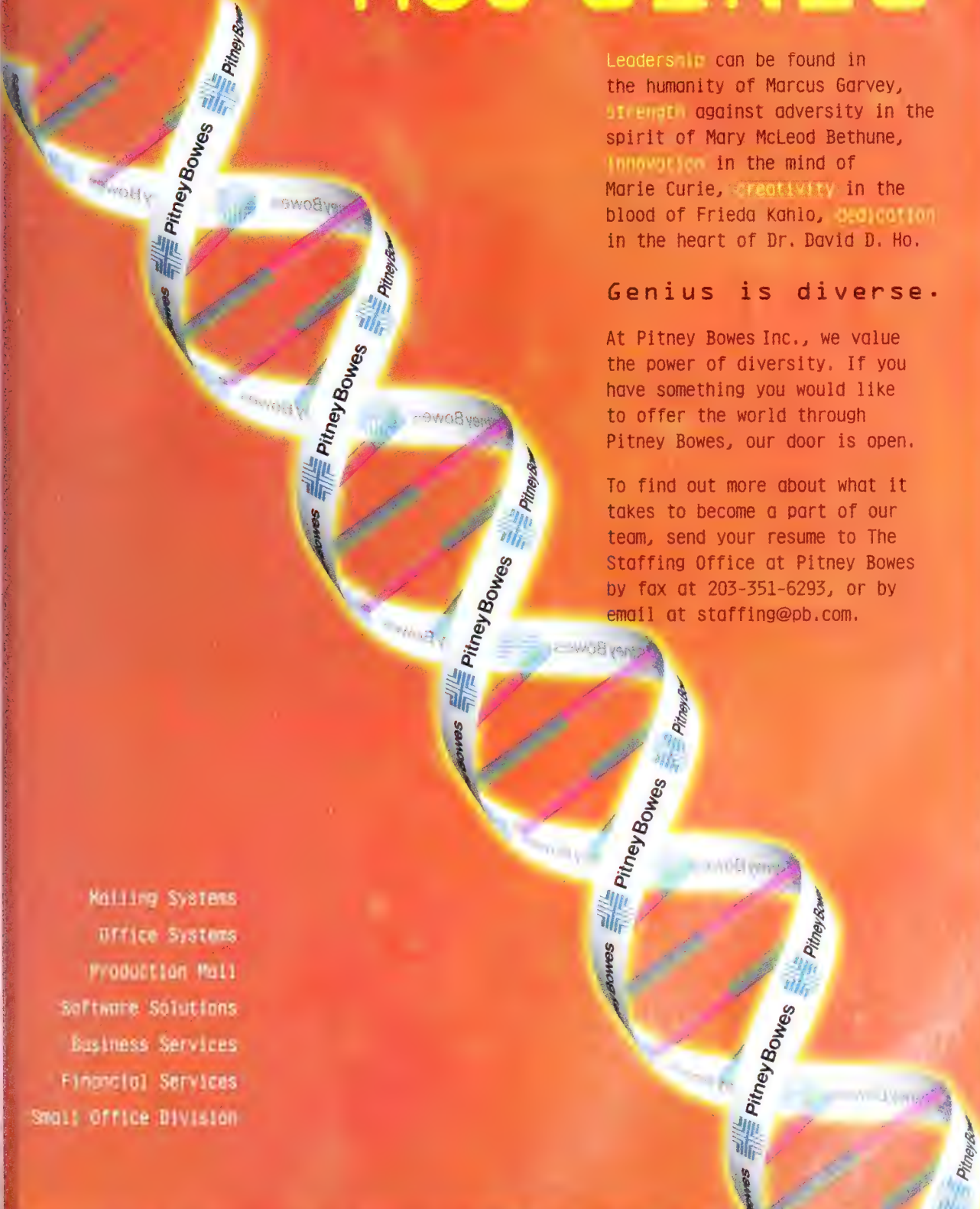
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individuals are defined by the group they are in. In that case, social differentiation is a negative. Success and effectiveness can be defined very differently in different cultural contexts—we have to understand this.”

The bottom-line is that there are frameworks, taxonomies, for helping us to understand, communicate and work across differences. It is as simple as raising awareness, and as complex as trying to understand the subtle nuances of those things only those born into a culture can understand and the societal norms we conform to. We are constantly reminded of a need to become aware of our own culture, our own biases, and how to overcome them while trying to understand the framework, cultural perspectives, or “world view” others might be coming from. Barbara Deane, editor of *Cultural Diversity at Work* says, “We are all cultural beings. You speak through culture, look through it, act through



it, make sense through it, and relate to it. Get to know what your own cultural bubble is and you can start to better understand others.”

Barbara Stern reminds us that cultural competence is not only an individual necessity, but an organizational one. She explains, “We need to be able to work with and respond to people externally as well as internally. Our organizations have to support people who come from other cultures and not the mainstream. If the system at the corporate level has a bias, you have to ensure you don’t have it.” According to Beau Stubblefield-Tave, director of Apt Associates Center for Cultural Competence, Evaluation, and Improvement, “A culturally competent organization leverages diverse viewpoints and recognizes and promotes the strengths of non-traditional employees and actively targets and serves varied communities in its marketplace. Cultural competence creates sustained competitive advantage. But, this requires on some level a value for diversity.”

Valuing a Diverse Workforce

Creating and managing diversity alludes to a somewhat compliance driven necessity. But, when we talk of “valuing” a diverse workforce, we enter a new phase, one that implies internalization and integration. It is a higher level of involvement and commitment in attitudes, practices, policies, and procedures. General Motors’ director, community relations and diversity initiatives, Lorna Utley, explains, “Creating and managing an inclusive culture should become a natural part of everything you do. We at GM are driving to institutionalize an inclusive culture through our key values.” Marriott International’s executive vice-president, human resources, Brendan Keegan adds, “Our corporate values are not just nice statements or nice things to do. They are critical to our business success.”

Our value of ‘Taking Care of the Employee,’ underscores our founder’s fundamental belief and experience that, when you ‘take care of your employees, they will take care of the customers.’ This is what our business is about.”

Ann G.T. Young, director, staffing, diversity and work/life for Eastman Kodak agrees with the importance of values. “Everything we do is based on the five Kodak Values. They are: respect for the individual, uncompromising integrity, trust, credibility, and continuous improvement and personal renewal. Each of us has responsibility for accepting, communicating and acting accordingly.” As a global company Young recognizes for Eastman Kodak that, “Each region around the world works in ways consistent to these values. Within that, there is the opportunity to customize for local needs.” She concludes, “In order to contribute to our fullest extent, each of us as an individual needs to be in an environment that is safe, where there is hope, and that is flexible enough to allow all people to be themselves.”

Valuing our Ubuntu: Cultural research and motivation theory indicates that people contribute most, give of themselves, when they feel valued. Deepak Sethi believes, "Irrespective of talent, people will not give hearts and mind unless they feel valued." Brendan Keegan confirms, "Our fundamental value of treating the individual employee with dignity and respect is transferable around the world. We do not create it, but rather seek to draw out from the people we hire, their natural instinct for taking pride in their work and their natural need to be treated with dignity and respect. These needs are universal and the values supporting these needs can be universal also."

We find a value for individuals and respect can go a long way in companies. An interesting example comes out of South Africa. Lente-Louise Louw, co-author of *Valuing Diversity: New Tools for a New Reality*, and director, new product development at Griggs Productions recalls an experience while working with a large South African corporation based in Johannesburg. She explains, "During the course of a survey I conducted in a large company well regarded for progressive management, equitable salaries, good health care and other benefits, but steeped in long standing prejudices about the capabilities of its ('lazy') workers, there was great resistance to the questions I was putting directly to workers regarding their own work practices. Despite the aid of a translator, my words fell on deaf, unresponsive, and hostile ears. Finally, an older worker spoke up. I will never forget the connection with this old man nor the experience. He said, 'We leave our Ubuntu at home.' It became clear that the management's denial of the workers personhood," its lack of respect, lack of knowledge, lack of recognition of workers as fellow human beings—effectively shut down the process of UBUNTU. Ubuntu is a Nguni word that means 'the quality of being human.' Its equivalent term is also found in other African languages and is a key concept that regulates inter-personal relationships in African culture. It shows itself in social interaction and is highly valued by African people. Ubuntu provides a framework for diverse people to contribute to the problem solving. Because of the trust, respect, and acceptance, people are not afraid to participate and voice their ideas and feelings."

Corporate values can only go so far; it is the act of valuing an employee that makes the difference. Given the demographic transformation of our times it inherently

means investing in our diverse people and with that comes the challenge of diversity with its problems and opportunities. Says Louw, "Overall we know there is strength, but it needs to be valued. Most importantly, we need the full participation of every individual and partnership and cannot afford to lose any potential (UBUNTU) because a person's fullest self is devalued."

The Character of a Multicultural, Inclusive Organization: When asked the question, "what characterizes an inclusive organization?" a theme of common descriptions arose:



- Effectively manages people who are different
- Willing to seek out information about internal and external environment
- Able to admit weakness, mistakes
- Doesn't place people in boxes
- Free of fear
- Heterogeneity at all levels
- Empowers people
- Recognizes and utilizes people skills and abilities
- Talks to customers
- Can deal with ambiguity and uncertainty
- Fosters learning and exchanging of ideas
- Entrepreneurial
- Flexible

BellSouth Corporation's vice-president of Human Resources, Richard D. Sibbersen, explains, "Organizations need to create environments where diversity of thinking and thoughts and demographics are respected, rewarded, and utilized. It should be the kind of environment where people say, 'I like what I do, who I work for, and am proud to be a part of this organization.'"

Leveraging a Diverse Workforce

Leveraging diversity is contingent upon the interlinking of the workforce, workplace structure and the marketplace according to Julie O'Mara. She explains:

• "*Leveraging* diversity in the marketplace includes serving customer groups with sensitivity to their diversity.

• "*Leveraging* diversity of the workforce means assuring persons of all dimensions are included in all aspects of the organization; and reducing barriers to enable all employees to fully use their talents for the organization.

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 Washington National Corporation, Robert Patin
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 Wyse Technology Inc., Douglas Chance

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•*Leveraging* diversity work addresses organizational structures because of the need to build effective teams, work effectively across levels and organizational boundaries, and blend work cultures of units, subsidiaries, and newly merged organizations."

Peter Bye, corporate diversity director for AT&T confirms, "you need to make the linkage between the individual and the organization. If we really have an environment which brings out different perspectives, and use those in a productive way, then business products and services can improve." At Honeywell, Patsy Randell, vice-president, corporate diversity and multicultural business affairs, adds, "We want to make sure we are thinking and executing from a multicultural perspective on all levels—internally, externally, domestically, and internationally. As a global company, it is very clear, whether we travel or not, we are a multicultural organization. Multiculturalism recognizes that diversity is broad, it touches talent, customers, suppliers, relationships in general, and the work environment and company culture. These components tie this directly to business strategy and practices."

Proving cultural diversity can be leveraged for bottom-line impact and top-line growth is less important than recognizing that cultural diversity is a reality to be dealt with—just like a global economy, volatile markets, changing technology, and any other business issue. The important thing is ensuring that an organization has addressed systemic actions for ensuring an inclusive environment that leverages its talent of all kinds at all levels. Anderson J. Franklin, asserts, "We should be just as challenged at managing a diverse workforce as we are challenged by developing, marketing and promoting our products." Fannie Mae's CEO Jim Johnson concludes: "Run diversity like any solid business function. Establish hard goals, maintain hard responsibility and accountability, measure progress, fix problems, and you will succeed."

We are reminded, continuously, that this is a journey, a learning process. When thought of in the context of continuous improvement, we realize we may make mistakes, that change is constant forcing the continuous evolution of our organizations, but that built upon core values, strong leadership commitment, and effective strategies, organizations can leverage cultural diversity to organizational and individual success.

Each of us has responsibility to make diversity, cross-cultural communication, and relationships work. Organizations also have responsibility to ensure they create a work environment where people can make a

difference. Valerie Crane, executive vice-president corporate diversity development at Bank of America observes, "We are in a balancing act where everyone can thrive. Corporate culture crosses all geographies, and we have to balance global with local needs, corporate values with local, and ensure a culture of inclusion. CEOs are "looking for a corporate culture that foster learning and sharing and exchanging of ideas so that corporations can impart that knowledge corporate wide," says Melissa Berman, senior vice-president research and program development, at The Conference Board, and author of *"How CEOs Drive Global Growth."*

"Walk together, talk together all ye peoples of the earth. Then, and only then, shall ye have peace." This motto of AFS International, from the Sanskrit, teaches us a basic concept: We can only have peace and understanding when we learn to talk walk together, and communicate across our differences. One executive interviewed exclaimed: "What concerns me in American diversity is that we don't stop and think that difference may be a cultural misunderstanding. It may not be racist, homophobic, but expressing something from a cultural perspective. We need to talk to clear it up for accuracy."

We have an opportunity to dispel myths, and to find out who people really are and what they can do.

When we see the tip of the iceberg are we seized with fear? Or, do we turn on the navigational system and explore the riches the iceberg can reveal? Are companies getting the mindshare of their employees, or are they just touching the tip of the iceberg? Embracing cultural differences is a choice we all have to make for ourselves. If we choose to act, to make a difference, we will have richer lives and will likely achieve profitable, sustainable, organizational success.



Resources to build your diversity coalition

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www.bellsouth.com

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www.chase.com

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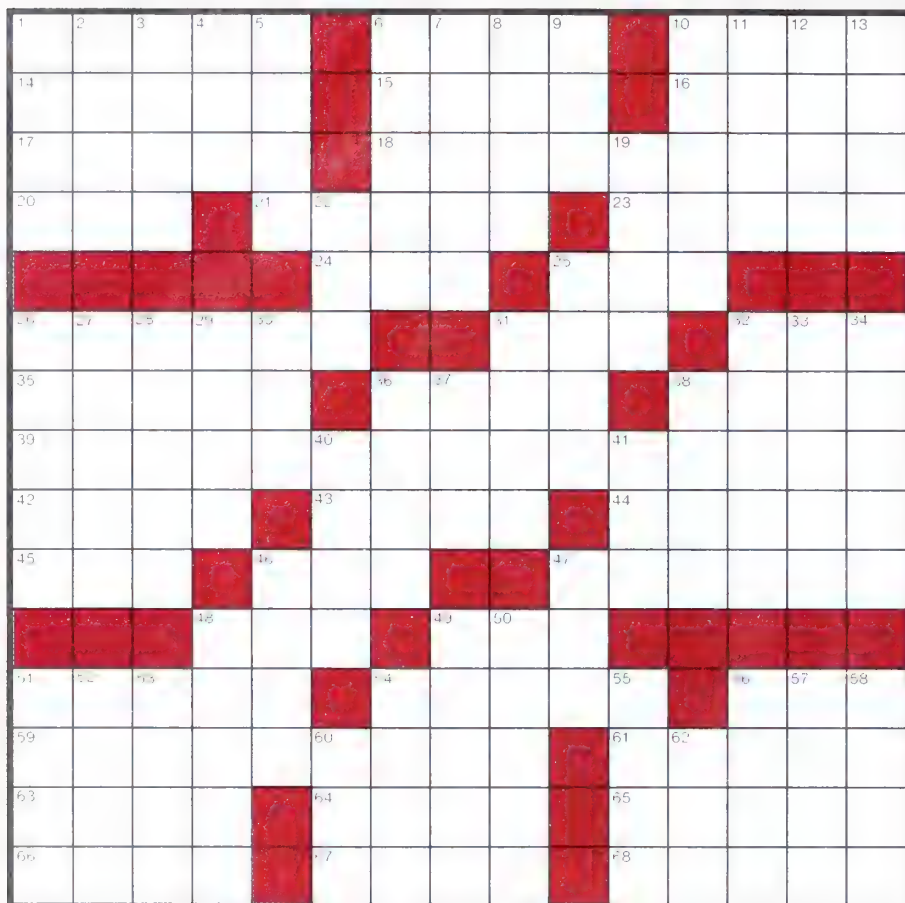
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Mixing Business with Pleasure by Lincoln

Puzzle #3



ACROSS

1. First industrial user of Niagara Falls
6. EPS, e.g.
10. Field of expertise
14. Ernst's partner
15. River of Florence
16. Inoperative, as a computer
17. Bistro patron
18. Macy's owner
20. '60s campus-protest group: Abbr.
21. Think-tank output
23. Woodruff Foundation beneficiary
24. O'Hare, on luggage tags
25. "My country __ of thee"

26. Reduced slightly
31. Operating expenses, so to speak
32. Pittsburgh-based bank's ticker symbol
35. Profit
36. OPEC minister, perhaps
38. Pisa dough
39. Business book by a Notre Dame ex-coach
42. Sicilian spouter
43. Impose, as a tax
44. __ and desist
45. For example
46. Ante- relative
47. Current ambassador to China
48. British tavern

49. Chernow's "Titan" is one
51. Holes in the wall, maybe
54. Computer City owner
56. Big name in payroll processing
59. Consumer spending's fraction of real GDP
61. Flip-chart holder
63. Pennsylvania port
64. Onetime Venetian official
65. Hertz competitor
66. Deli delivery
67. Editor's marking
68. Tend to an overgrown fern

DOWN

1. Roll-call count
2. __ factor (airline exec's concern)

3. Reductions
4. Washington's bill
5. Prefix for "business"
6. Treasury bonds, vis-à-vis junk bonds
7. "__ luxuriously" (see page at right)
8. "No ifs, __ or buts!"
9. Golf-club part
10. "Dilbert" cartoonist
11. Tiller starter
12. Water pitcher
13. Mr. Warhol
19. Construction-credit vehicle Abbr.
22. Cabinet department, for short
25. Part of CRT
26. __ plan (post-WWI reparations payment system)
27. Lloyd Webber score
28. Source of trouble for Zoe F.
29. Former "New Yorker" editor Brown
30. Ivy Leaguer
31. Old __ (Gap chain)
32. Exemplar of greed
33. Answering-machine button
34. Management stratum
36. Former Bendix CEO
37. Gun the engine
38. Strong cleaning solutions
40. Federal workers' rights group Abbr.
41. GE purchase of '86
46. Press the sale of
47. Outfield material
48. Sampras and namesakes
49. Employee wear, at times
50. Close-up map
51. Suffix meaning "practitioner"
52. Out of whack
53. Pâté de __ gras
54. Horse's gait
55. Fiscal period
56. Memo acronym
57. Floor model
58. Place points on a graph
60. Social Security numbers, for example
62. 48 Across offering

For answers to this puzzle:

Turn to page 176 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.

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Environment

FISHERIES

HOOK, LINE, AND EXTINCTION

As fish stocks plunge, will the industry change its ways



The cod off the New England and eastern Canadian coasts were once so abundant that, it was said, a man could walk across the seas on their backs. In these fertile depths, they grew into six-foot-long, 200-pound giants. But in a watery echo of the fate of the buffalo, the fish were practically wiped out by decades of overfishing. Now, the typical cod landed by Chatham (Mass.) fisherman Ed Rohmer tips the scales at 20 pounds—when he can manage to find the fish at all. “This year has been pretty bad,” he laments.

The near disappearance of the cod after decades of overfishing is costing New England \$350 million per year in vanished income and the loss of 14,000 jobs, compared to what a properly managed fishery could sustain. Worldwide, 30% of fish stocks, from orange roughy and shark to swordfish and tuna, are declining because of overexploitation—and an additional 44% are on the edge, according to a recent report from the

OREGON TUNA
The West Coast regional plan for conservation looks good, but environmentalists say it's not being followed

National Academy of Sciences. That's putting a \$100 billion-per-year industry that provides 200 million jobs. The crisis is so acute that members of the U.N.'s Food and Agriculture Organization agreed at a meeting in October to begin the

task of reducing the size of fishing fleets. “It's remarkable that so many countries have recognized the problem—and realized that it's in everyone's economic self-interest to deal with it,” says D. Garcia, Assistant Secretary of U.S. Commerce Dept. and chief negotiator at the FAO meeting in Rome. **LONG LIST.** The potential benefits of such action are huge. The current global catch stands at about 84 million tons of fish, plus about 27 million tons of “by-catch.” If today's fleet of 50 million fishing boats—including 50,000 sizable ones from China—could be reduced to a sustainable level, today's catch probably could be “continued on a sustainable basis.”

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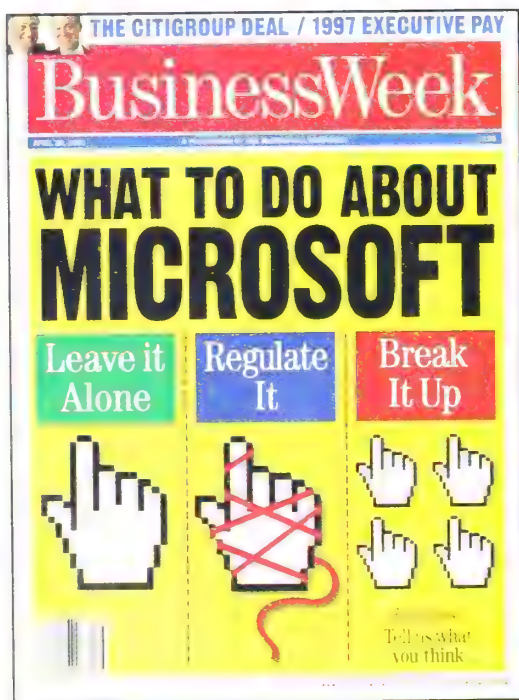


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s report. But if species are allowed to rebound and fishing is then at a reasonable level, the haul could be boosted by 10% to 20%.

In U.S. waters, more than 80% of the fish stocks—the basis of a commercial fishing industry—were disappearing in the mid-1990s or were on the brink of being overfished. The long list of endangered species includes Atlantic halibut, red snapper, and Pacific halibut. So in 1996, the Republican Congress bucked its usual anti-environmental stance and

passed a pro-conservation bill. The legislation requires the National Marine Fisheries Service and eight regional fishing councils to set limits on overfishing, to monitor the catch of fish that are not being replenished (such as red snappers in the Gulf of Mexico), and to protect key habitats, such as bottom areas critical to the survival of fish that can be damaged by trawling and dredging. The new law is one of the best we've done for

fish," says biologist John Musick of the Virginia Institute of Marine Science. **Q** The crucial question, however, is whether the steps taken under the new law are adequate. Conservationists praise the bill, but the Pacific Fishery Management Council's plan for protecting fish such as lingcod, rockfish, and bocaccio on the West Coast, for instance, requires reductions in fishing once the population of a given species drops to 10% of the estimated levels before fishermen arrived on the scene—effectively closes the fishery entirely when the stock drops to 10% of the pre-fishing level. "The council is not abiding by its own plan, and the actual fishing reductions are too little and too late," says biologist Joshua Sladek-Nowlis, director of the Center for Marine Conservation, a Washington-based environmental organization. He believes the lingcod and bocaccio may not recover.

Environmentalists retort that stricter regulations may be overkill. "We don't have definitive answers on what the sustainable harvest should be," argues Ralph

Brown, the owner of two trawlers operating out of Brookings, Ore. "We don't want to hurt businesses and communities that rely on lingcod when we don't know enough about the fish."

Similarly, environmentalists argue that fishing for spiny dogfish in New England must be halted. "Any delay could be the death knell of the species," says D. Douglas Hopkins, senior attorney at the Environmental Defense Fund and a member of the New England Fishery Management Council. The council, however, favors a

delay, and it has not imposed strict enough limits on cod and other species, biologists warn—in part because of intense pressure from fishermen and from politicians such as Senator Edward M. Kennedy and Representative Barney Frank, both from Massachusetts.

Conservationists and biologists are lobbying hard to create the political will needed to take strong steps. They are also pressuring the National Marine Fisheries Service to make the regional plans tougher. Meanwhile, fishermen themselves

are realizing that many species of fish do need help—and that their business will be better if stocks can recover. On the Pacific Coast, for example, Brown is working to cut the number of trawlers from 250 to below 200. "The idea is to tax ourselves to buy out people" who want to get out of fishing, he explains.

But even more radical changes may be needed. The most controversial recommendation of the NAS panel is that governments should assign individual fishermen or communities the rights to certain amounts of fish or to specific fishing grounds. That would give fishermen the incentive to preserve the value of their share or right over the long haul, explains Michael Sissenwine, director of the Northeast Fisheries Science Center in Woods Hole, Mass. The transition "won't be easy," he warns, since it would put some fishermen out of business. But unless such stern measures are taken around the world, the ocean's bounteous fisheries may become a distant memory.

By John Carey in Washington

TACKLING THE GLOBAL FISHING CRISIS

► On Oct. 22, the National Academy of Sciences issues a report documenting the overfishing that threatens cod, tuna, swordfish, and scores of others.

► In late October, Food & Agriculture Organization of the U.N. member nations agrees to identify the subsidies that have spurred excessive growth of fishing fleets, in hopes that fleets can be reduced.

► In mid-November, at an international meeting, the U.S. pushes for stricter limits on catches of bluefish and swordfish.

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EDITED BY AMY DUNKIN

FEAR NOT ALL HEDGE FUNDS

If you're thinking about investing in a hedge fund, a good starting point is to study Long-Term Capital Management. Then run in the other direction. For most investors, the characteristics of the ideal fund are the opposite of those of Greenwich (Conn.)-based LTCM, whose leveraged bets went so bad that its bankers had to take it over in September, injecting \$3.6 billion.

Contrary to popular impressions, hedge funds aren't just for risk-hungry investors who sky-dive on weekends. Sure, there are funds that use lots of borrowed money to juice up their bets. But others use little or no leverage. And many pursue investing strategies aimed at low volatility, even if that means accepting lower returns. "People think of hedge funds generically but there is a very big difference in the ways they control risk," says John Taylor, a managing director at Goldman Sachs.

BRUTAL YEAR. As LTCM founder John Meriwether and other battered hedge-fund pros can attest, 1998 has been a brutal year for most of the industry. The EACM 100 hedge-fund index, compiled by Norwalk (Conn.)-based consultant Evaluation Associates Capital Markets, was down 2.5% through Oct. 31 vs. a 13% rise for the Standard & Poor's 500-stock index.

Over the long term, though, hedge-fund performance has been better. According to a study this year by Goldman Sachs and London-based Financial Risk Management, a typical fund produces returns approaching those of the S&P 500, yet with smaller fluctuations. The

study covered a representative selection of 277 funds from 1993 through 1997. For instance, so-called "market-neutral" funds, which try to exploit pricing anomalies between related securities, had an annualized return of 13.4% and a standard deviation of 1.86. (Standard deviation is a measure of volatility, and the lower, the better.) Over the same period, the S&P 500 returned 20.3% annually, but with a standard deviation of 10.7. Indeed, Managed Account Reports, a New York financial-research group, lists four funds whose standard



Choices for Fund Investors

HEDGE OR MUTUAL?

Hedge funds offer a wider range of investment choices than mutual funds do. They charge more, too: typically 1% of assets annually and 20% of profits. Some mutual funds have begun mimicking certain hedge-fund strategies by employing short-selling. These funds charge 2% to 2.5% of assets, and none of the profits.

MACRO OR NICHE?

The best-known hedge funds are global "macro" funds that make leveraged bets on currencies and interest rates. More common are funds that focus on one area, such as distressed securities or bond arbitrage.

SINGLE OR FUND OF FUNDS?

If you select your own fund, you can zero in on those you like best. If you go with a fund that invests in several hedge funds, you get diversification, which can reduce your risk. But you have to pay an extra layer of fees.

INDEPENDENTS OR INSTITUTIONS?

Brokers and mutual-fund groups are starting up more hedge funds. Institutions usually have better investor relations than hedge-fund boutiques, but that doesn't mean they earn better returns.

deviation was below 1% of 1997 and again through Oct. 31: Argen- sic Convertible Arbitra- its Bermuda-based coun- offshore investors; Ger- portunity Fund; and Gamma Fund, biggest four with \$1 billion in

Picking a low-volatility hedge fund isn't the only way to reduce risk. Another way is to diversify by purchasing several hedge funds. Hedge funds aren't low in risk but do have low volatility when you put them together. The idea is that they must have different investing styles, so they don't all move up and down in the same step. Hedge funds offer dozens of exotic styles that aren't easily available elsewhere, from investing in distressed securities to participating in venture-capital financing. So the hedge-fund world offers you greater opportunities for diversification than if you restrict your investments to stocks and bonds.

Most advisers say to



typical fund produces returns similar to the S&P, with lower risk, a study says

number of hedge funds for the sake of diversification is around seven. If it's not affordable that many, an alternative is a fund of funds. A drawback is that a fund-of-funds manager will charge 1% of assets under management of the hedge funds' returns. Some also charge a percentage of any profits. Two forming funds of funds with relatively low volatility are Tremont Advisers' offering, with an annualized return of 12.5% in the four years ended Sept. 30, and Dillon Fund's Market Neutral with a 12.5% return. However, no matter what you pick, you have plenty to choose from. Some 4,000 domestic and offshore,

now manage about \$400 billion in assets. Hedge funds are largely unregulated on the theory that the rich can look out for themselves. They're usually structured as limited partnerships in which managers receive a substantial share of any profits. Minimum investments range from \$100,000 to \$20 million—but the typical amount is \$1 million. You're obliged to commit your money for a minimum period, up to several years. That gives managers breathing room to attempt long-range strategies, although some have been forced to raise cash lately in expectation of large redemptions sparked by the market's recent volatility.

Only 1.5% of U.S. families

qualify to invest in hedge funds. That's because federal law limits most hedge funds to no more than 99 limited partners with steady annual incomes of \$200,000 or more or a net worth of \$1 million, excluding their home. Funds can have up to 499 limited partners if each has \$5 million in invested assets. Many hedge funds, such as Julian Robertson's Jaguar Fund and all of George Soros' hedge funds, are domiciled off-

shore and are not open to U.S. citizens. But other Robertson funds are open to Americans.

In selecting a fund, make sure the general partner has a lot of his or her wealth—preferably 40% or more—invested in it. Examine its track record through market cycles. Says Robert Schulman of Tremont Advisers in Rye, N. Y.: "We're interested in people who have shown a combination of will and skill to stay in business."

As with mutual funds, hot

only their own house funds.

It's also possible to mimic the strategy of some hedge funds without getting into a hedge fund at all. A tax-law change last year made it easier for mutual funds to sell shares short, so they can replicate the "long-short" strategy that many equity hedge funds follow: buying some stocks and shorting others so the portfolio is somewhat immunized from

swings in the overall market. The \$300 million Barr

Rosenberg Market Neutral mutual fund is an example. (It was down 1.9% from its inception last Dec. 16 through this October.) Market-neutral mutual funds don't skim off a share of the profits, and their asset-management fees—2% to 2.5%—aren't much higher than the 1% asset-management fees typical of hedge funds.

LEGWORK. You can invest in the funds by contacting a fund directly or a brokerage firm that offers hedge funds. But for thoroughness, consider using a consultant such as Hedge Fund Research (312 658-0955), New York-based Hennessey Group (212 857-4400), or Van Hedge Fund Advisors International of Nashville, Tenn. (615 377-2949). They charge about 1% of invested assets as a fee for assembling a portfolio that meets your needs. Some consultants accept payments from the funds themselves, but then you're not sure you're getting unbiased advice. You can also do your own legwork by getting data from Hedge Fund Research, which charges \$6,000 a year for performance data, updated monthly, on the 1,400 or so funds that take new investors. Managed Account Reports (212 213-6202) also charges \$6,000 for a similar product.

Hedge funds are certainly for big players—folks who need wide diversification and are comfortable with specialized investments. But the funds aren't necessarily nitroglycerine, no matter what the headlines say. *Peter Coy*

YOUR MONEY INVESTING

SHOULD YOU PLUG INTO A GE FUND?

Joining the letters "G" and "E" brings to mind lots of things, from lightbulbs to jet engines. But GE mutual funds? General Electric means to change that. After nearly six sleepy years in the fund arena, the colossus is finally stirring.

In print ads that began right after Labor Day, individuals are being urged "when you think of mutual funds, think of GE." A TV ad campaign begins in early 1999. Says GE Funds Chief Michael Cosgrove: "We're actively committed to this business in terms of building the brand." Cosgrove hopes GE Funds will swell tenfold over the next five years, to assets of more than \$40 billion—still a relative small fry, but not one the industry can ignore.

JUST AVERAGE. For fund investors, though, the question is different: In a universe of 5,251 mutual funds at last count, are GE's 16 anything special? So far, probably not. "Investing with GE, you would be getting average performance. Most investors are looking for a little bit more," says David Masters, an analyst with Standard & Poor's Micropal (like *BUSINESS WEEK*, a unit of The McGraw-Hill Companies).

Average performance or not, GE is adding funds at a rapid clip. In 1998, it introduced six, the latest a small-

company offering that opened Oct. 1. Next year, Cosgrove plans to launch a dozen more, including one focused on European stocks. Every fund, he argues, will enjoy an edge by virtue of GE's expertise running money for institutions. The company has been managing pension investments since 1927 and now oversees \$75 billion in GE-related assets and those of outsiders.

GE's clout gives it early looks at some of the best investment ideas. The market intelligence that comes with a company garnering \$99 bil-

lion in global revenues a year doesn't hurt, either. "We have businesses everywhere around the world—from Indonesia to Japan to Australia—and we can tap into them for what is really happening," says GE International Equity Fund manager Ralph Layman, who oversees \$9 billion. One example: a prescient warning from GE managers in Latin America in

1996 to dump stock in a Brazilian appliance maker. "I also knew that our appliance people were going to be getting more aggressive in that market—a pretty good piece of information," Layman adds. Among his recent picks:

Toshiba, in part because of GE's collaboration with the Japanese exporter on quality-improvement programs, and DaimlerChrysler. He expects the carmaker's cash flow to grow 8% to 10% a year, but its shares are going for just five times his estimate of 1999 cash flow.

A similar growth-at-a-reasonable-price strategy underlies GE's picks in the technology portfolio manager David Carlson has been buying shares in such companies as cell-phone giant AT&T for GE Premier Growth Equity Fund and Elfund Short for Electric Fund. The fund represents taxable portfolios for GE employees, limit taxable capital-gain distributions to Elfund investors—which erodes returns—Carlson says.

trades a share friendly price return

investors can expect, As good as all this, anyone tempted to invest money should ponder issues. One is cost. In GE's funds can be had, paying a load of up to 1% or a fee to an investor adviser. Ongoing expenses, no bargain, either. Performance also remains a despite GE's size and savvy. Most of its returns have fairly short records we focused on a group of four that returned five years old. In the five years ended 31, none beat its benchmark, although Layman's stock younger international did so by 0.32 percentage point. Says Morningstar analyst Eric Jacobson: "They are no real dogs, but they are no stars here, either."

Cosgrove says the aim is to top their stock market indexes, "but we want to do it in a controlled way." Troubled according to Morningstar of the four funds—Layman's—has delivered what's called "alpha"—a return beyond what's expected for a degree of risk taken. If alpha is no mean feat. Only one in eight U.S. funds have done so in 1995. But that still gives hundreds to choose from 138 of them without and something else to over before you sign up for a GE fund. Robert

YOUR MONEY FUND WATCH

A Mixed Performance

| FUND/SYMBOL | MORNINGSTAR RATING | AVG. ANNUAL TOTAL RETURN* | ALPHA** |
|-----------------------------|--------------------|---------------------------|---------|
| GE GOVT. SECS. A (ITGAX) | ★★ | 4.6% | -2.3 |
| GE MID-CAP GROWTH A (IGRAX) | ★★ | 12.7 | -2.3 |
| GE TAX-EXEMPT A (GETAX) | ★★★ | 5.6 | -0.6 |
| GE VALUE EQUITY A (ITVAX) | ★★★★ | 18.3 | -2.2 |

* Five years ended Oct. 31

** A measure of the difference, in percentage points, between a fund's actual returns and its expected performance, given its level of risk

DATA: MORNINGSTAR INC.

BIG SCORE LITTLE BANKS?

You missed the chance to buy on the market's recent dip, but don't despair. Some

stocks are left—maybe in your backyard. Based on estimated 1999 earnings, some of the nation's 1,340 publicly traded community banks are selling at a 36% discount to the Standard & Poor's 500-stock index. That's the lower end of their historical range of half to equal P/E's value, notes Mark Ribbon, managing director at Sandler O'Neill & Partners, a New York investment bank.

Full-bank and thrift banks—which are selling at even deeper discounts—have been punished by pessimism about near-term prospects for takeovers of their less-liquid assets of the market. Many small banks flush with equity, and with higher capital ratios than their larger brethren. Money center and regional banks have capital ratios of 7% of assets, while community banks (with assets between \$100 million and \$1 billion) have about 9%, according to SNL Securities, a financial research firm in Charlottesville, Va. Thrifts, on average, have capital ratios of 10% with some nearing 30%—percentage points more required by regulators. Less capital can finance loans or business ventures and reduce returns. Capital can also be distributed to shareholders through dividends or stock buybacks. But there's a reason small banks are undervalued: When the economy sours and loan losses mount, they have a hard time raising money. So even

in flush times, they keep extra capital on hand for protection. As a result, even as the strong economy has helped banks large and small create five consecutive years of record earnings, the lenders' return on equity has remained puny (table). "Wall Street doesn't like them because they're underleveraged," says San Diego value investor Charles Brandes, who has been accumulating shares of underperforming lenders in hopes of revived profits or takeovers.

Not every bank is a merger target. Some community

lenders' shares are concentrated in the hands of insiders resistant to change, says Bert Ely, an Alexandria, Va., banking consultant. Takeovers of banks in slow-growing markets are also unlikely. That's the reason Ely counsels avoiding "anything with an ROE below 12%, unless you have good reason to think something is going to change in the near future."

Still, plenty of underachievers merit a look. Keefe, Bruyette & Woods, an investment bank that specializes in the banking industry, likes Mercantile Bankshares of Baltimore and Houston-based Prime Bancshares of Texas. Both are in fast-growing markets and have enough capital to repurchase stock, making them alluring to suit-

ors and investors. Mercantile is fairly priced compared with its peers, but Prime Bank is cheap at 12.2 times estimated 1999 earnings of \$1.45, says Keefe Bruyette analyst Marni Pont O'Doherty.

Meanwhile, Jerome Davis, a Greenwich (Conn.) shareholder activist, owns stakes in about 25 savings and loans. He is trying to persuade two

tiny ones that went public recently, GS Financial of Metairie, La., and United Tennessee Bankshares of Newport, Tenn., to pay hefty one-time dividends to reduce their capital levels of about 32% and 26%, respectively. GS Financial President Donald Scott says a special dividend is "an option" if a five-year plan to expand mortgage

YOUR MONEY STOCKS



LENDERS WITH APPEAL

| BANK / COMMENT | PRICE* | CAPITAL RATIO | RETURN ON EQUITY |
|--|----------|---------------|------------------|
| MERCANTILE BANKSHARES
Growing market | \$35 1/4 | 13.3% | 15% |
| UNITED TENN. BANKSHARES
Low p-e ratio | 11 3/4 | 26 | 6 |
| GS FINANCIAL
Takeover bait? | 13 1/4 | 32 | 4 |
| BROOKLINE BANCORP
Strong management | 11 7/8 | 32 | 7.4 |
| VALLEY NATIONAL BANCORP
Solid earnings | 29 1/16 | 10 | 19.5 |

*Nov. 30

DATA: BLOOMBERG FINANCIAL MARKETS, BUSINESS WEEK

lending and add services doesn't boost returns. United Tennessee President Richard Harwood didn't return calls. Although both have purchased stock already, "there is a serious risk of underperformance," Davis says of GS Financial, whose ROE of about 4% trails even United Tennessee's lackluster 6%.

Buying stock in a small bank or thrift requires much analysis and a leap of faith. A lot of value is buried in some banks' fat balance sheets. But unless management is willing to engineer a turnaround or sell to someone more capable, what looks like a bargain could be a bust.

Anne Tergesen



THE ODYSSEY: A sporty ride plus lots of features

MINIVANS: FINALLY, HONDA GETS IT RIGHT

For Honda, the minivan had always been a blind spot. Although its Accord is one of America's favorite cars, Honda didn't even offer a minivan for years. When it finally came out with the quirky little Honda Odyssey four years ago, it missed the mark by a mile. Too small. Too weak. Not family friendly enough.

But Honda took its mistakes to heart and got to work, coming up with a 1999 Odyssey that shares only its name with its puny predecessor. Honda transformed it into the biggest vehicle it has ever produced. It's also the most powerful minivan on the road, packing a 210-horse-

power v6 engine. Indeed, Honda figured out what no other Japanese minivan maker understands: To soccer moms and dads, size does matter.

That's a lesson Chrysler, learned long ago. The auto maker, now DaimlerChrysler, owns nearly half the U.S. minivan market, with its Dodge Caravan, Plymouth Voyager, and Chrysler Town & Country. But with the reinvented Odyssey's debut, DaimlerChrysler is acting scared: On Nov. 20, it announced a \$1,000 rebate on all its minivans.

FORMIDABLE FOE. Indeed, the Canadian-built Odyssey is a formidable foe for DaimlerChrysler. It meets or beats DaimlerChrysler's most dominant model, the Dodge

Grand Caravan, by any measure. The Caravan has 168.4 cubic feet of interior space; the Odyssey has 170.7. The Caravan has six cup holders; Odyssey, nine. Each minivan model has storage bins aplenty, including a purse holder under the front passenger seat.

Honda also has gone to war on price. The old Odyssey started at \$24,615 and climbed rapidly. The up-sized replacement begins at \$23,415, with few costly additions. Sure, that's still nearly \$3,000 more than a base-model Grand Caravan, including the \$1,000 rebate. But the

Honda comes with several standard features, such as separate air conditioning controls for backseat passengers and a cassette stereo. The top-of-the line Odyssey EX goes for \$26,215 and is packed with standard features such as dual power sliding doors, a power-adjustable driver's seat, and a CD stereo. By comparison, a loaded Toyota Sienna tops out at \$30,784, but has 20 cubic-feet less cargo space.

The Odyssey's most ingenious feature is tucked away

in the back: a third-row bench seat that, at the push of a strap, collapses flat into the floor. That's no more muscling cars into some seats out of the way to make room for extra gear. The third-row disappearing act allows the Odyssey to accommodate 4-by-8-foot wood sheets.

The real measure of the Odyssey is the sporty and handling that is its trademark. I was skeptical that Honda could engineer a spunky driving personality into a portly minivan while taking the family drive, I threw the Odyssey hard into a sharp turn. Only squealing came from the wife and three kids. The Odyssey gripped the road with none of the unbecomingly wallowing, tipsy feel of older minivans.

Those who prize road manners are already separating the Odyssey from the Grand Caravan. Ford's Windstar minivan, which Ford overhauled this year for the 1999 model, finally adding an alternative fourth door (standard on the Odyssey), but only as a \$350 option. The automaker also has taken the first step of offering a \$500 rebate on its freshly redesigned minivan. While Ford and Dodge have Honda beat in 0-to-60-mph acceleration, minivan drivers don't care. The more appealing

YOUR LIFE AUTOS

Sizing Up the Competition



HONDA ODYSSEY



DODGE GRAND CARAVAN



FORD WINDSTAR



TOYOTA SIENNA

| | HONDA ODYSSEY | DODGE GRAND CARAVAN | FORD WINDSTAR | TOYOTA SIENNA |
|--------------------|----------------------|----------------------|----------------------|----------------------|
| PRICE* | \$23,415 | \$21,720 | \$24,590 | \$22,738 |
| ENGINE | 3.5 liter V6, 210 hp | 3.3 liter V6, 158 hp | 3.8 liter V6, 200 hp | 3.0 liter V6, 194 hp |
| GAS MILEAGE | 18 city/26 highway | 18 city/24 highway | 17 city/24 highway | 18 city/24 highway |
| LENGTH | 201.2 inches | 199.6 inches | 200.9 inches | 193.5 inches |
| WIDTH | 75.6 inches | 76.8 inches | 76.6 inches | 73.4 inches |

*Base price for four-door model

attributes are the Odyssey's carlike riding and quiet interior. The Odyssey's style points for a familiar, slightly manly appearance, which designers say is inspired by a medieval knight's armor. The Odyssey's edge, along with its handling, could unlock the minivan success Honda. Perhaps Honda has found a way to ditch the dowdy old minivan cool. *Keith N...*



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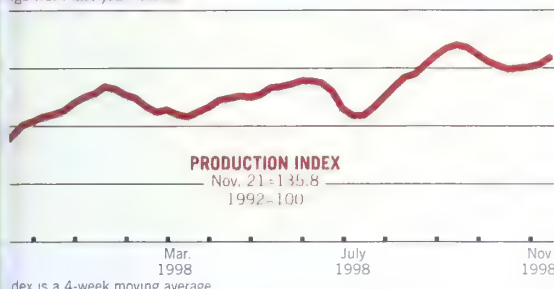
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Business Week Index

TRAFFIC INDEX

Change from last week: 0.4%
Change from last year: 5.2%



The traffic index continued to climb in the week ended Nov. 21. The index was also up, to 137 from 135.6. Seasonally adjusted output of light traffic increased 3.9%, with loadings of crushed stone, gravel, up 24.4% over year-ago levels. Coal production was up 2.3%, and 2,217 railroad cars. Also posting gains were steel (+3.8%), trucks (+0.4%), and electricity (+3.1%). Autos and crude-oil production declined.

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FINANCIAL INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|------------|--------------|
| PRICES (11/27) S&P 500 | 1192.29 | 1163.55 | 24.8 |
| GOVERNMENT BOND YIELD, Aaa (11/27) | 6.25% | 6.31% | -8.5 |
| SUPPLY, M2 (11/16) billions | \$4,382.9 | \$4,374.8r | 9.0 |
| CLAIMS, UNEMPLOYMENT (11/20) thous | 314 | 300r | -2.5 |
| MORTGAGE APPLICATIONS, PURCHASE (11/27) | 293.8 | 259.3 | 19.4 |
| MORTGAGE APPLICATIONS, REFINANCE (11/27) | 2,086.3 | 1,814.8 | 151.8 |

Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Association. (Index: March 16, 1990=100)

BEST RATES

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|---|-------------|----------|----------|
| FUNDS (12/1) | 4.82% | 4.58% | 5.55% |
| CREDIT PAPER (12/1) 3-month | 5.08 | 4.97 | 5.71 |
| RATES OF DEPOSIT (12/2) 3-month | 5.19 | 5.18 | 5.80 |
| MORTGAGE (11/27) 30-year | 6.93 | 7.03 | 7.36 |
| FIXED RATE MORTGAGE (11/27) one-year | 5.71 | 5.82 | 5.71 |
| 1/27) | 7.75 | 7.75 | 8.50 |

Federal Reserve, HSH Associates, Bloomberg Financial Markets

1=Western Wood Products Assn. 2=Southern Forest Products Assn 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

MENT CREDIT

Dec. 7, 3 p.m. EST ▶ Consumers added about \$5 billion in new debt, says the median forecast of its surveyed by Standard & Poor's vision of The McGraw-Hill Company. Allment borrowing jumped \$8.4 billion in September and has been accelerating in 1998. That's probably a result of better conditions enjoyed by more jobs.

ACCOUNT BALANCE

Friday, Dec. 9, 10 a.m. EST ▶ The U.S. account deficit, a tally of the trade as well as financial obligations to the U.S. securities, probably topped

\$60 billion in the third quarter, up from \$56.5 billion in the second. That means the current account deficit would equal 2.8% of gross domestic product, up from 2.7% in the second quarter. When a current account gap hits 3% of GDP, downward pressures often grow on the nation's currency.

BEIGE BOOK

Wednesday, Dec. 9, 2 p.m. EST ▶ The Federal Reserve's roundup of regional economic activity as reported by its district banks will be released in advance of its policy meeting on Dec. 22. Analysts will likely be most interested in what the Beige Book has to say about bank lending to businesses. The reduction in available credit was one

consideration that led to the Fed cutting interest rates three times since Sept. 29.

RETAIL SALES

Friday, Dec. 11, 8:30 a.m. EST ▶ The S&P MMS survey says retail sales likely rose 0.2% in November, on top of a 1% jump in October. Excluding cars, sales probably increased 0.3%, after gaining 0.5% in October.

PRODUCER PRICE INDEX

Friday, Dec. 11, 8:30 a.m. EST ▶ Producer prices of finished goods were probably unchanged in November after rising 0.2% in October. Excluding food and energy, the core index likely edged up 0.1%, the same tiny advance posted in October.

PRODUCTION INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|-----------|--------------|
| STEEL (11/28) thous. of net tons | 1,736 | 1,892# | -22.0 |
| AUTOS (11/28) units | 74,161 | 118,376r# | 1.3 |
| TRUCKS (11/28) units | 85,733 | 151,432r# | -1.0 |
| ELECTRIC POWER (11/28) millions of kilowatt-hrs. | 58,753 | 61,512# | -2.2 |
| CRUDE-OIL REFINING (11/28) thous. of bbl./day | 14,337 | 14,252# | -3.9 |
| COAL (11/21) thous. of net tons | 22,043# | 21,801 | 6.4 |
| LUMBER (11/21) millions of ft. | 514.3# | 501.1 | 7.1 |
| RAIL FREIGHT (11/21) billions of ton-miles | 28.4# | 27.8 | 4.8 |

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPAl, SFPAl, Association of American Railroads

PRICES

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|----------|--------------|
| GOLD (12/2) \$/troy oz. | 294.150 | 296.450 | 0.4 |
| STEEL SCRAP (12/1) #1 heavy, \$/ton | 85.50 | 85.50 | -40.4 |
| COPPER (11/27) c/lb. | 74.4 | 74.9 | -14.7 |
| ALUMINUM (11/27) c/lb | 62.0 | 62.8 | -20.3 |
| COTTON (11/27) strict low middling 1-1/16 in., c/lb. | 63.84 | 65.17 | -5.9 |
| OIL (12/1) \$/bbl. | 10.89 | 11.66 | -41.5 |
| CRB FOODSTUFFS (12/1) 1967=100 | 196.86 | 195.84 | -20.9 |
| CRB RAW INDUSTRIALS (12/1) 1967=100 | 267.64 | 267.57 | -15.9 |

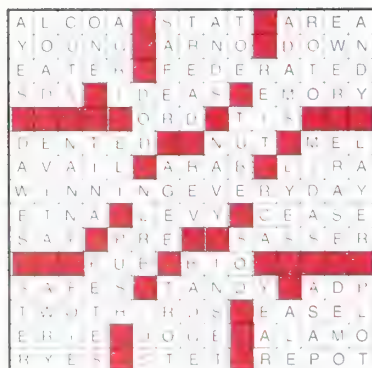
Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, COMEX, CME, Reuters, Reuters

FOREIGN EXCHANGE

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|---|-------------|----------|----------|
| JAPANESE YEN (12/2) | 120.08 | 120.93 | 128.60 |
| GERMAN MARK (12/2) | 1.67 | 1.71 | 1.77 |
| BRITISH POUND (12/2) | 1.66 | 1.66 | 1.68 |
| FRENCH FRANC (12/2) | 5.61 | 5.73 | 5.92 |
| ITALIAN LIRA (12/2) | 1656.0 | 1690.5 | 1734.5 |
| CANADIAN DOLLAR (12/2) | 1.54 | 1.55 | 1.42 |
| MEXICAN PESO (12/2) | 9.964 | 9.915 | 8.125 |
| TRADE-WEIGHTED DOLLAR INDEX (12/2) | 107.5 | 108.4 | 108.4 |

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

Mixing Business with Pleasure by Lincoln



Answers from puzzle #3
in Business Week.



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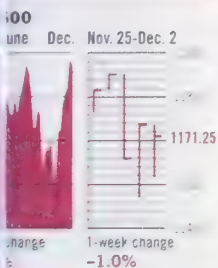
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Investment Figures of the Week

S



STOCKS

pulling back from their levels, and on Nov. 30 the worst decline in 11ths. The Dow Jones index fell 217 points, and the Standard & 500-stock index and composite also succumbed. The sell-off by computer stocks, had driven the NASDAQ to a new high on Nov. 30. The Dow's decline continued on Dec. 2. The dollar and bonds rose to their prices in six weeks on as investors reacted to oil prices.

U.S. MARKETS

| | Latest | % change
Week | Year |
|---------------------------|--------|------------------|------|
| Dow Jones Industrials | 9064.5 | -2.5 | 12.9 |
| NASDAQ Combined Composite | 1995.2 | 1.5 | 23.5 |
| S&P MidCap 400 | 352.9 | -0.8 | 7.3 |
| S&P SmallCap 600 | 166.5 | -0.1 | -7.2 |
| S&P SuperComposite 1500 | 246.5 | -1.0 | 17.6 |

SECTORS

| | Latest | % change
Week | Year |
|---------------------------|--------|------------------|------|
| Bloomberg Information Age | 425.7 | 1.6 | 40.7 |
| S&P Financials | 128.1 | -2.5 | 7.6 |
| S&P Utilities | 254.4 | -1.5 | 15.8 |
| PSE Technology | 409.3 | 1.6 | 34.2 |

FOREIGN MARKETS

| | Latest | % change
Week | Year |
|-----------------------|----------|------------------|-------|
| London (FT-SE 100) | 5507.2 | -5.0 | 10.8 |
| Frankfurt (DAX) | 4691.7 | -5.4 | 14.9 |
| Tokyo (NIKKEI 225) | 14,986.6 | -1.2 | -9.6 |
| Hong Kong (Hang Seng) | 10,055.8 | -7.3 | -10.3 |
| Toronto (TSE 300) | 6380.5 | -2.9 | -4.5 |
| Mexico City (IPC) | 3815.4 | -5.4 | -25.6 |

FUNDAMENTALS

| | Latest | Week ago | Year ago |
|-----------------------------------|--------|----------|----------|
| S&P 500 Dividend Yield | 1.33% | 1.32% | 1.57% |
| S&P 500 P/E Ratio (Last 12 mos.) | 30.1 | 30.8 | 24.6 |
| S&P 500 P/E Ratio (Next 12 mos.)* | 22.8 | 23.2 | 19.1 |
| First Call Earnings Revision* | -4.25% | -4.03% | -1.01% |

TECHNICAL INDICATORS

| | Latest | Week ago | Reading |
|----------------------------------|--------|----------|----------|
| S&P 500 200-day average | 1090.6 | 1086.7 | Positive |
| Stocks above 200-day average | 35.0% | 37.0% | Positive |
| Options: Put/call ratio | 0.43 | 0.46 | Negative |
| Insiders: Vickers Sell/buy ratio | 0.63 | 0.62 | Positive |

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

| | Last month % | Last 12 months % |
|---------------------------|--------------|--------------------------------|
| Specialty Appr. Retailers | 24.4 | Communications Equip. 74.0 |
| Semiconductors | 22.5 | Specialty Appr. Retailers 70.2 |
| Transportation Services | 22.3 | Genl. Merchandise Chains 59.2 |
| Invest. Banking/Bkrgr. | 18.6 | Drugs 56.5 |
| Hospital Management | 16.2 | Computer Systems 56.2 |

WORST-PERFORMING GROUPS

| | Last month % | Last 12 months % |
|-------------------------|--------------|-------------------------------|
| Oil & Gas Drilling | -34.8 | Oil & Gas Drilling -64.5 |
| Oil-Well Equip. & Svcs. | -25.4 | Oil-Well Equip. & Svcs. -45.4 |
| Oil Exploration & Prod. | -22.3 | Leisure Time -37.5 |
| Steel | -9.1 | Oil Exploration & Prod. -37.2 |
| Shoes | -8.8 | Metals -31.9 |

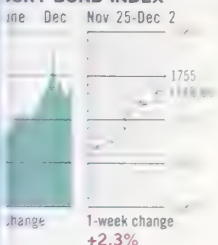
BLOOMBERG MONEY FLOW ANALYSIS

| Rebound ahead? | Price | 1-month change |
|------------------|----------|----------------|
| AT&T | 62 7/8 | -7 1/8 |
| Procter & Gamble | 87 1/8 | -1 1/16 |
| AMR | 65 7/8 | -1 1/8 |
| Apple Computer | 31 15/16 | -5 7/16 |
| BEA Systems | 12 | -7 7/32 |
| UAL | 63 11/16 | -1 1/8 |

| Decline ahead? Stocks with most significant selling on price strength | Price | 1-month change |
|---|---------|----------------|
| Cisco Systems | 75 1/8 | 12 1/8 |
| MCI WorldCom | 59 | 3 1/8 |
| Amazon.com | 192 | 65 7/8 |
| Yahoo | 192 | 61 7/32 |
| Inktomi | 132 1/8 | 48 1/8 |
| Network Appliance | 75 1/8 | 20 3/8 |

BOND RATES

TREASURY BOND INDEX



Data: Bloomberg Financial Markets

KEY RATES

| | Latest week % | Week ago % | Year ago % |
|---------------------------|---------------|------------|------------|
| MONEY MARKET FUNDS | 4.79 | 4.80 | 5.18 |
| 90-DAY TREASURY BILLS | 4.48 | 4.57 | 5.26 |
| 6-MONTH BANK CDS | 4.40 | 4.47 | 5.20 |
| 1-YEAR TREASURY BILLS | 4.40 | 4.60 | 5.53 |
| 10-YEAR TREASURY NOTES | 4.59 | 4.83 | 5.83 |
| 30-YEAR TREASURY BONDS | 5.02 | 5.19 | 6.02 |
| LONG-TERM AA INDUSTRIALS | 5.96 | 6.12 | 6.55 |
| LONG-TERM BBB INDUSTRIALS | 6.85 | 7.05 | 6.97 |
| LONG-TERM AA TELEPHONES | 6.35 | 6.48 | 6.96 |

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

| | 10-yr. bond
Latest week | Last week | 30-yr. bond
Latest week | Last week |
|-----------------------|----------------------------|-----------|----------------------------|-----------|
| GENERAL OBLIGATIONS | 4.14% | 4.17% | 4.80% | 4.84% |
| PERCENT OF TREASURIES | 90.24 | 86.38 | 95.62 | 92.96 |
| TAXABLE EQUIVALENT | 6.00 | 6.04 | 6.96 | 7.01 |
| INSURED REVENUE BONDS | 4.26 | 4.29 | 5.03 | 5.08 |
| PERCENT OF TREASURIES | 92.85 | 88.87 | 100.21 | 97.57 |
| TAXABLE EQUIVALENT | 6.17 | 6.22 | 7.29 | 7.36 |

MUTUAL FUNDS



Data: Morningstar, Inc.

EQUITY FUNDS

| Leaders | Four-week total return % | Laggards | Four-week total return % |
|----------------------------|--------------------------|------------------------------|--------------------------|
| Munder NetNet B | 27.7 | Rydex Energy Svcs. Inv. | -31.5 |
| Amerindo Technology D | 26.5 | Profunds UltraShort OTC Inv. | -27.4 |
| WWW Internet | 26.2 | Fidelity Sel. Energy Serv. | -27.0 |
| Profunds UltraOTC Investor | 21.9 | Icon Energy | -23.1 |
| Potomac OTC Plus | 21.2 | Oppenheimer Real Asset B | -18.8 |

| Leaders | 52-week total return % | Laggards | 52-week total return % |
|-----------------------------|------------------------|------------------------------|------------------------|
| Profunds UltraOTC Investor | 75.9 | Lexington Troika Russia | -79.8 |
| Transamerica Aggr. Gr. Inv. | 60.2 | American Heritage | -52.2 |
| Amerindo Technology D | 59.4 | Fidelity Sel. Energy Serv. | -48.7 |
| Dreyfus Technology Growth | 58.3 | Eaton Vance Wwde. Dv. Res. B | -48.2 |
| Flag Investors Commun. A | 54.4 | State St. Res. Glob. Res. B | -48.2 |

EQUITY FUND CATEGORIES

| Leaders | Four-week total return % | Laggards | Four-week total return % |
|------------------|--------------------------|----------------------------|--------------------------|
| Technology | 14.0 | Natural Resources | -7.9 |
| Communications | 8.7 | Precious Metals | -1.6 |
| Large-cap Growth | 7.9 | Pacific/Asia ex-Japan | -0.1 |
| Mid-cap Growth | 6.7 | Europe | 0.5 |
| Small-cap Growth | 6.0 | Diversified Emerging Mkts. | 0.6 |

| Leaders | 52-week total return % | Laggards | 52-week total return % |
|------------------|------------------------|----------------------------|------------------------|
| Communications | 27.8 | Latin America | -32.1 |
| Large-cap Growth | 22.6 | Diversified Emerging Mkts. | -26.8 |
| Technology | 21.1 | Natural Resources | -25.1 |
| Utilities | 16.8 | Pacific/Asia ex-Japan | -17.3 |
| Large-cap Blend | 16.5 | Real Estate | -14.6 |

Figures of market close Wednesday, Dec. 2, 1998, unless otherwise indicated. Industry groups are as of Dec. 1. Bloomberg money flow analysis is as of Nov. 30. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

Figures of market close Wednesday, Dec. 2, 1998, unless otherwise indicated. Industry groups are as of Dec. 1. Bloomberg money flow analysis is as of Nov. 30. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

EXXON MOBIL MEETS AMAZON.COM

Technology is a relentless force that creates and destroys with little pity. For proof, look no further than the imploding oil industry and the booming Internet. What was once a colossus bestriding the world—Big Oil—is shrinking. And what didn't even exist for most people a decade ago, the Internet, is exploding with new companies and new opportunities. Schumpeter's description of capitalism as "creative destruction" is apt. But it doesn't go far enough. Technology works by changing the very rules of the economic game.

Take the oil industry. From the time of John D. Rockefeller's Standard Oil trust to the glory days of the Seven Sisters, the industry's ability to exercise control over a finite, critical resource allowed it to amass enormous wealth and power. But technology is changing all that by expanding worldwide reserves while making refineries much more efficient. The result? The oil scarcity of the '70s is now replaced by abundance in the '90s. And while the recession in Asia has lowered demand for the moment, technology is likely to make oil plentiful for decades. Thanks to innovation, oil today can be lifted out of the ground for \$3 a barrel.

Greater supplies, higher efficiencies, and lower prices mean only one thing—consolidation. The merger of Exxon and Mobil (page 34) is the latest in a series that brings the Seven Sisters down to four. Technology is undermining the need for capacity and increasing the drive to cut costs. In the U.S., since 1990, 29 refineries have closed. Yet production has actually increased and prices have fallen sharply. More consolidation is sure to follow. A combined Exxon Mobil will soon control 14% of U.S. refining, equal to Texaco-Shell and a bit more than the 12% of BP-Amoco. Similar ratios work for gas stations. Washington regulators have legitimate antitrust

concerns about the recombination of the old Rockefeller. But technology may be changing the old antitrust equation too. Cornering the oil market is difficult when supply is increasing. Who would have thought 18 years ago, when a barrel of oil was \$40, that it would be \$11 today?

Nowhere have the economic rules been changed so much by technology than on the Internet. In the past, the barriers to entry into oil, steel, autos, and telephone markets were extremely high. New players needed enormous capital and the capacity to capture leading market positions and generate profits. Or they received government-sanctioned monopolies as in cable.

Not so on the Net. Little capital is needed to start a site or service. And certainly no government help. Competition is open, fierce, and relentless. The efficiency of the marketplace is far higher in virtual reality than at the marketplace. As a result, profits are hard to come by. Margins are razor-thin; they exist at all. A company such as Amazon.com has achieved a market capitalization of \$11 billion without making profits. Technology also changed the rules of financial valuation. It appears so at first glance. Revenue growth and market share, not profits, are propelling hot Net stocks. Investors are willing to bet on a payoff 15 years down the road (page 11). That's a long time to wait. Digitalization of books, music, and videos, Amazon's current product base, will lower the barrier to entry even further, opening the Net to more competitors. Technology will force Amazon to move ahead.

But that's what technology does. The only certain technological change is that it is constant, painful and, in the end, positive for economic growth. Along the way, it breaks established rules for just about everything.

DON'T UNDERMINE THE EURO

It will be the boldest experiment in the recent history of world finance. At market opening on Big Bang Monday, Jan. 4, Europe's new currency starts to phase in, as Continental stocks and bonds begin trading in euros. If all goes well, the creation of a unified currency zone almost as big as the U.S.'s could boost the Old World into an economic powerhouse to rival America. Weak European financial markets should surge, and a new reserve currency should take its place within investors' portfolios along with the dollar.

Unfortunately, the euro is off to a rough start. Europe's raft of new center-left governments, notably the one led by Gerhard Schröder in Germany, threatens to sap the progress achieved in making the region more competitive. Their attacks on the new European Central Bank, hints of ending the fiscal austerity mandated by monetary union, and talk of locking in relatively high taxes Europewide, have rattled business confidence and threatened investment. The recent purchase of

Chrysler by Daimler Benz, Bankers Trust by Deutsche Bank, and half of Barnesandnoble.com by Bertelsmann—the shift of capital investment by giant German companies in the country—a shift that could get worse.

It's time for the new new-left in Europe to get a grip. The Continent won't fully benefit from the euro unless the competition it's designed to engender is allowed to prosper. That means Europe must have a strong central bank and a counter backsiding by governments into profligacy. It also means high-tax nations like France should move down toward low-tax countries such as Ireland. And that the deregulation being phased in by the European Commission in uncompetitive industries like telecom, airlines, and energy must go on. Europe's new governments must follow through. Anything less could make the euro another failed stab at reviving Europe's competitiveness.



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In the Quest for High Performance, So

By John Cafab

If you're an automotive designer, there isn't a more challenging or, ultimately, a more rewarding assignment than to be given the opportunity



{ The new lighter, stiffer hardtop takes Corvette performance capabilities to the ultimate degree }

to create the next Corvette. It's not something we take lightly. Great automotive design and Corvette have gone together since the very first one in 1953. It's about heritage, passion, tradition

and the future, all at once. And the fact that any new Corvette design must speak loudly of the performance potential that lies underneath the skin. The new Corvette hardtop would certainly have to measure up to some pretty lofty standards.

Our Future Must Start With Our Past. Our past is really important to the Corvette Design Team. Each and every day, we live and breathe Corvette history. Legends like the Corvette SS. The original Sting Ray. The '63 Coupe. The Mako Shark. It's all there for us to see whenever we turn a corner in the halls of our design studios. From memorable street cars and significant race cars to forward-looking concept cars and design studies, we feel the



{ Detailed aerodynamics. Like all Corvette men

presence of every Corvette that en before. Which is exactly why it's su a to have the opportunity to design e Because as designers, we don't jtt new Corvette, we get a chance to nk



T h e N e x t C o r v

Business Week

DECEMBER 21, 1998

THE MCGRAW-HILL COMPANIES / \$3.95

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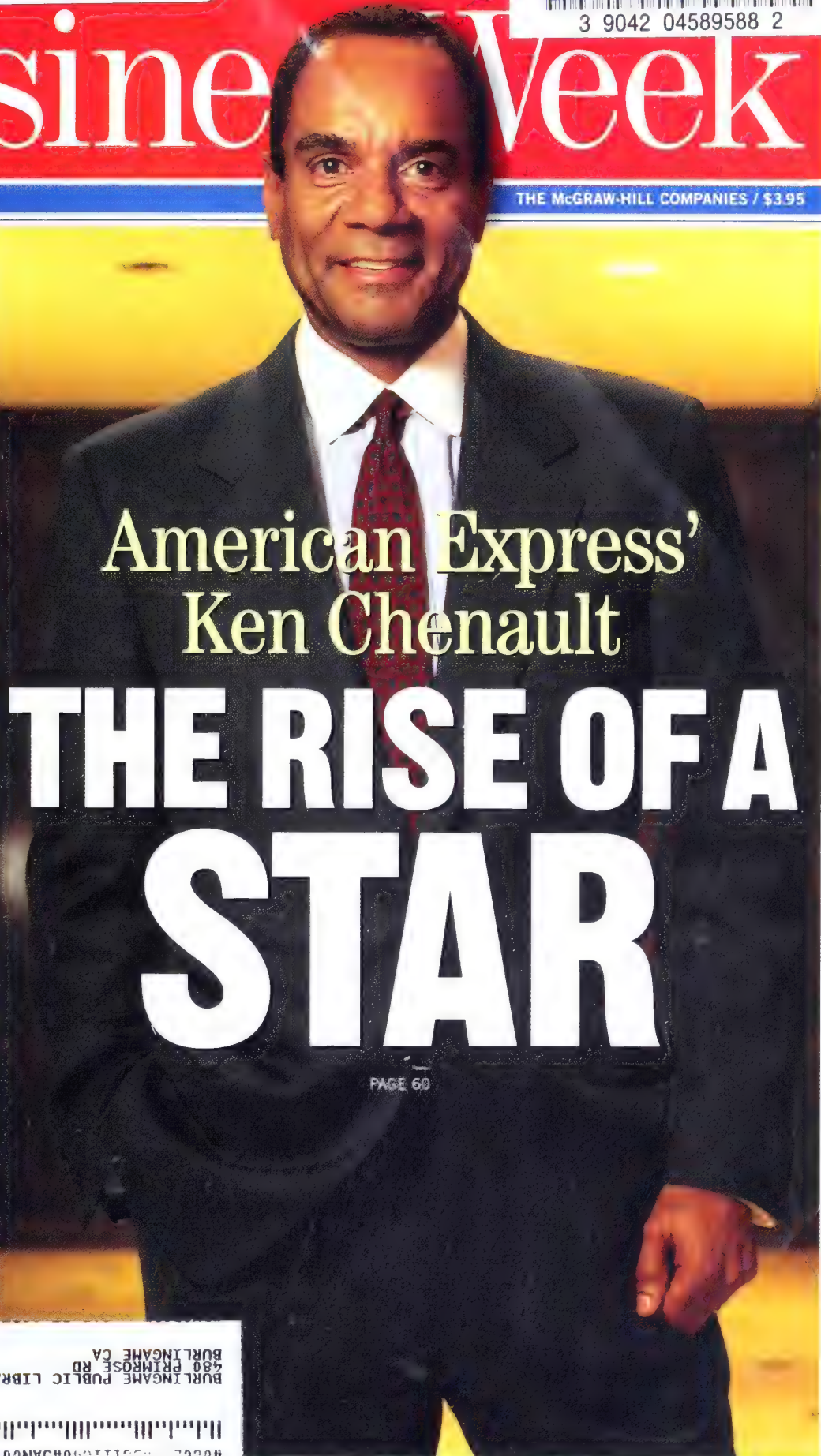
The class
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American Express'
Ken Chenault

THE RISE OF A STAR

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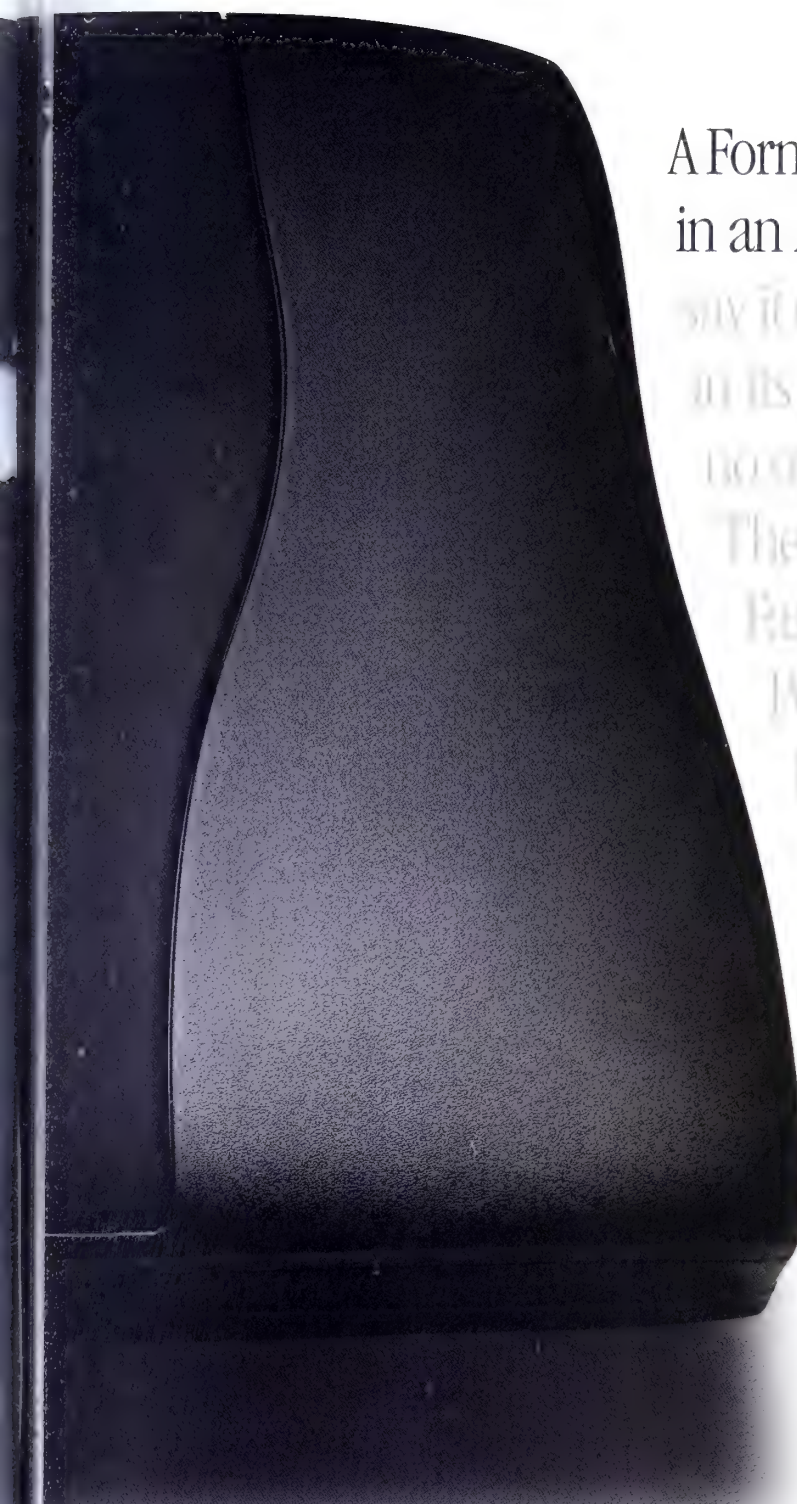
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Never once did she dream of building a database. But Diane could dream a hundred ways to make her department run more smoothly. So, after a particularly brutal month of late nights, lost weekends and questionable cuisine, Diane gleefully dug up the old cliché: If you want something done right, do it yourself.

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COVER STORY

STAR POWER

Ken Chenault keeps
going at American
Express. Is the
corner office next?

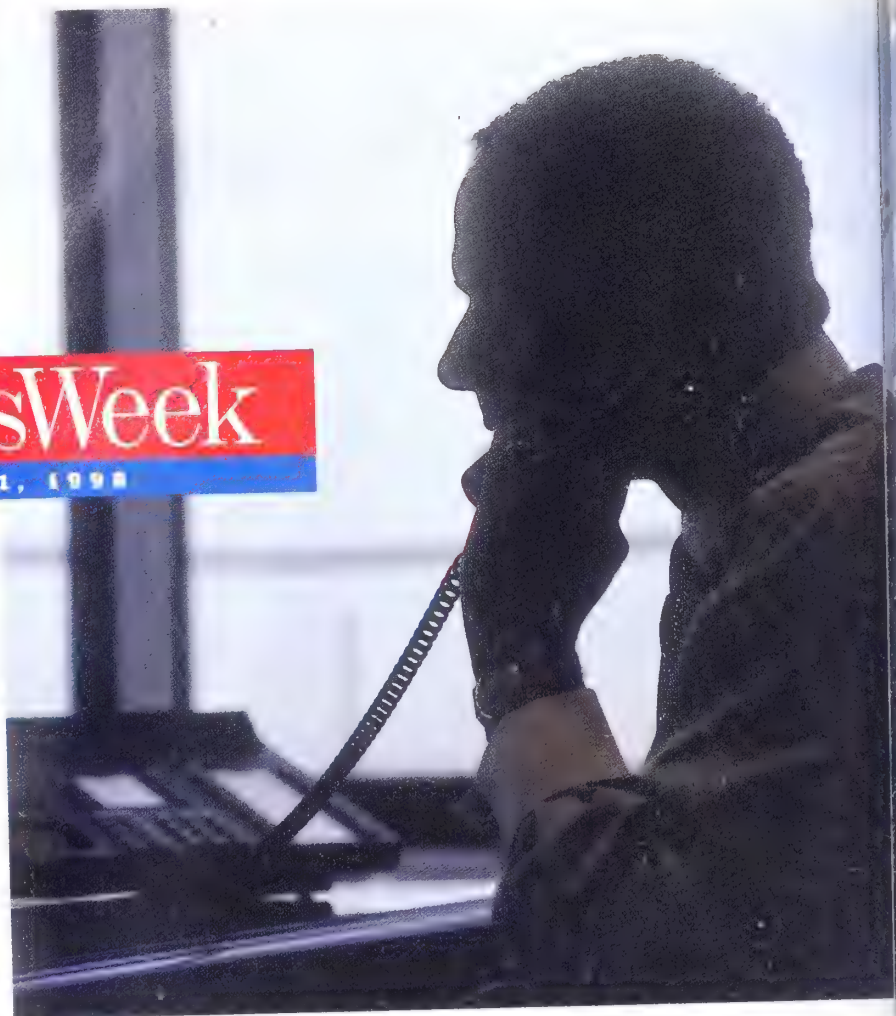
BusinessWeek

DECEMBER 21, 1998



GOOD FOR YOU?

Disease-fighting
foods could be the
next big thing



Cover Story

60 THE RISE OF A STAR

At Bowdoin College in the 1970s, Ken Chenault's fellow "Afro Am" activists figured he would be an Establishment success. They were right. By the '90s, Chenault was turning around American Express' credit-card business. Today, he is president of AmEx, working side by side with CEO Harvey Golub. And no one thinks the escalator ride is over

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Few blacks hold top posts—and the corner office remains a white preserve

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Big wheels keep on spinning as each side holds forth on the courthouse steps

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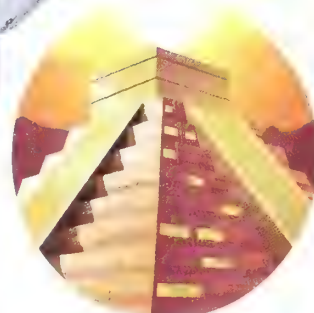


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Politicians have no time to lose

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IGNTON OUTLOOK

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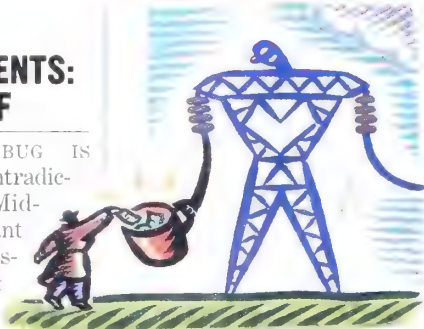
EDITED BY ROBERT McNATT

Y2K FEVER

UTILITY TO CLIENTS: DO IT YOURSELF

THE YEAR 2000 BUG IS making for weird contradictions at one big Midwestern utility. Alliant Energy, owner of Wisconsin Power & Light, is advising some customers to buy their own power generators if they want to be sure the lights stay on in 2000. Yet Alliant is also asking regulators for a \$16.1 million rate hike to help inoculate it against the dreaded Y2K bug.

Alliant isn't trying to get something for nothing. To its credit, it is diligently preparing for 2000 by doing widespread debugging of its system. But it admits there may still be some power outages because thousands of embedded computer chips in power-regulating devices—its own and others'—cannot recognize



year 2000. With 176,000 pieces of equipment and 6,000 vendors and suppliers, the utility won't be able to fix every one before Dec. 31, 1999.

So Alliant is telling many rural and corporate clients to make their own power. "For some people, an outage for a half-hour in the dead of winter could be very serious," says spokesman David Giroux, "so buying a generator might be a good idea." That may not be what consumers want to hear. But at least they'll be prepared. *Marcia Stepanek*

TRADE WINDS

A HELPING HAND FOR U.S. APPLE PICKERS

U.S. APPLE GROWERS ARE getting hit from all sides. Exports to Asia are off because of the financial crisis there. Imports of cheap apple-juice concentrate from China are undercutting domestic sales. And now, the \$1.7 billion industry is facing an embarrassment south of the border. A 1994 NAFTA provision, originally designed to protect Mexican unions, could, to the dismay of American growers, be used on behalf of U.S. workers.

American apple pickers represented by the Teamsters complained to a Mexico City



JUICY: Teamster and

NAFTA panel about allegedly unsafe working conditions, mainly at orchards in Washington State. Significantly, it's the first time U.S. workers have used the Mexican NAFTA panel to protest U.S. working conditions. The process, says Pharis Harvey, executive director of the International Labor Rights Fund, "will expose some of our own failings in the U.S. to protect workers' rights."

The panel's ruling isn't expected until next year. But the prospects of being badmouthed *en Español* are already worrisome to U.S. growers. Findings supportive of labor could result in higher tariffs on apple products exported to Mexico. *Paul Magnusson*

TALK SHOW "We have heard from so many college professors that I think I'm going to ask if we can get college cr..."

—Judiciary Committee Chairman Henry Hyde on the House impeachment hearings

MAKEOVERS

YELLOW PAGES TURN OVER A NEW LEAF

AMERICANS HAVE LET THEIR fingers do the walking for more than three decades. But those dancing digits are headed out the door. On New Year's Day, the Yellow Pages Publishers Assn. (YPPA) will launch a \$25 million print and TV advertising campaign that will introduce a new motto, "Get an idea," and a new icon, a lightbulb. The YPPA says it wants folks to think of the Yellow Pages as a "tool for new ideas." Says Marketing Vice-President Clint Pollard: "It's not just a place to look stuff up; it's a place to think stuff up."



GET AN IDEA.

But skeptics are that in the age of the net, the YPPA needs than just a new logo to up. Although most Pages are now online putting them there same A-to-Z format enough, says Lisa Allen, analyst at Forrester search. She forecasts 2003, niche directories list, for ex lawyers by sp instead of grouped tog will have 80% \$1.1 billion market. Then she says, w well to follow suit. As lightbulb campaign? Allen: "Instead of sayin an Idea,' it might be for the Yellow Pages a Clue." *Joan*

UNION DUES

LABOR LEARNS WALL STREET'S GAME

IN NOVEMBER, DREAMWORKS SKG, the entertainment company, penned a deal to build a \$200 million movie studio in Los Angeles to anchor the massive Playa Vista real estate project, planned to include 13,000 homes. But the deal's most improbable player is a union-owned insurer, ULLICO—parent of Union Labor Life Insurance—which is showing how labor can achieve its goals by flexing its financial muscle.

After much wheeling and dealing, ULLICO ended up as a Playa Vista co-owner with L.A. dealmaker Gary Winnick, Goldman Sachs, and Morgan Stanley Dean Witter. ULLICO obtained pledges for 125,000 new union construction jobs over 15 years.



STEED: Good returns—and new m

ULLICO is clearly ro play with Wall Street g Vice-President Mike has invested in 55 dea 1992, reaping average returns of 33%. And tained agreements tha

co's partners will rem central in any union-rec drives affecting them "Private capital inv says Steed, "creates untunities for unions high rates of return ganize new workers Bernstein and Ron C



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Up Front

Y2K FEVER

NEXT YEAR'S TOASTS COULD BE TAXING

IT SEEMS A TAD SUSPICIOUS. U.S. vintners of top-flight *méthode champenoise* sparkling wines (read: champagne) are predicting a shortage for



HERE'S LOOKING....: At big prices?

the year 2000. By late '99, says Joy Sterling of California's respected Iron Horse Vineyards, "you will not be able to saunter into your wine store and pick up a prestige vintage brand." And Gary Heck, CEO of Korbel

Wine Cellars, is echoing Moët Hennessy's warnings to U.S. distributors: "If you don't have orders in for (the millennium) by Aug. 1, they won't guarantee supply."

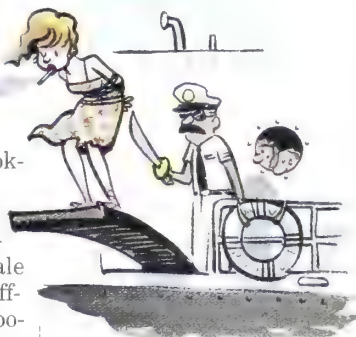
Is all this just an orchestrated panic attack being used to raise prices? Industry surveys have predicted champagne price hikes of up to 100% next year for top champagnes, though the general manager of French champagne maker Tattinger, Philippe Court, expects the Year 2000 celebrations to change demand little. Still, Iron Horse is selling futures contracts on 3-liter jero-boams, starting at \$400, while Korbel's 12-liter bottles will go for \$2,000 apiece. Just remember, says Court, champagne prices have been falling since the late 1980s. So expect price hikes of 3% to 4% next year—just to begin to make up for lost ground. *Joan Oleck*

VACATION NATION

ALL BUTTS OVERBOARD

WHEN CARNIVAL CRUISE Lines says there is no smoking on its new \$350 million MS Paradise, it means business. During a recent promotional cruise, a female travel agent was caught puffing. The onboard "smoke police" confiscated her cigarettes and administered a severe reprimand. And this is a woman they hoped would sell tickets for them.

Had she been a paying passenger, she would have faced a \$250 fine and been dumped at the nearest island to find her own way home—penalties she would have had to agree to before boarding. If she were a Paradise employee, she would be fired on the spot. Says Carnival President Robert Dickinson: "We made it clear 18 months ago that Paradise would be com-



pletely smoke-free, and we intend to be very stringent in enforcing that policy."

The Paradise is the world's first totally nonsmoking cruise ship. It hopes that will draw business from hospitals and health groups. Says Diana Orban, a spokeswoman for Cruise Lines International Assn.: "It's probably going to be very attractive." Still, she concedes, money talks: If the policy turns off too many potential customers, there will be ashtrays in Paradise before too long. *Dennis Blank*

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MAD AVE

SALESMAN OF THE YEAR?

GETTING TV ads to stand out among the blizzard of broadcast and cable messages is Marketing 101. So how's a company to feel when it finds itself among five national advertisers all using the same nerdy stand-up comic in their ads, a relative unknown named Jim Gaffigan? Well, evidently, the company will be grateful. This guy sells the goods. And he's cheaper than Michael Jordan.

Winding up on so many ads all at once was happenstance, though a happy one for the advertisers. Says Toby Barlow, the TBWA/



Chiat Day creative director for Barnes & Noble: "Gaffigan appears like an Englishman—but has a fantastic wit." He's on a literary tour for Barnes & Noble.com, and a host of other projects, including a Rolling Rock

GAFFIGAN He can pitch

as well as pitch Gen

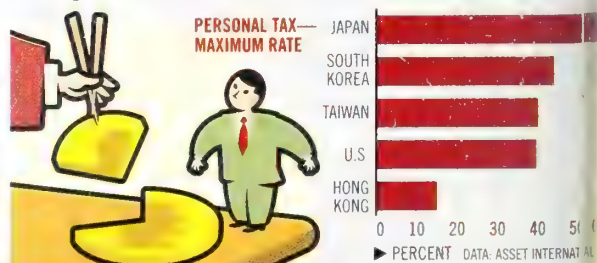
Mills's Total cereal and, by the way, the Internet service, also does ads for Kodak.

The companies don't mind Gaffigan's being all over the place. But the advertisers may wonder what happens if the hits it big in a movie. Fame and glory could price the pitchman beyond reach. *Dennis Blank*

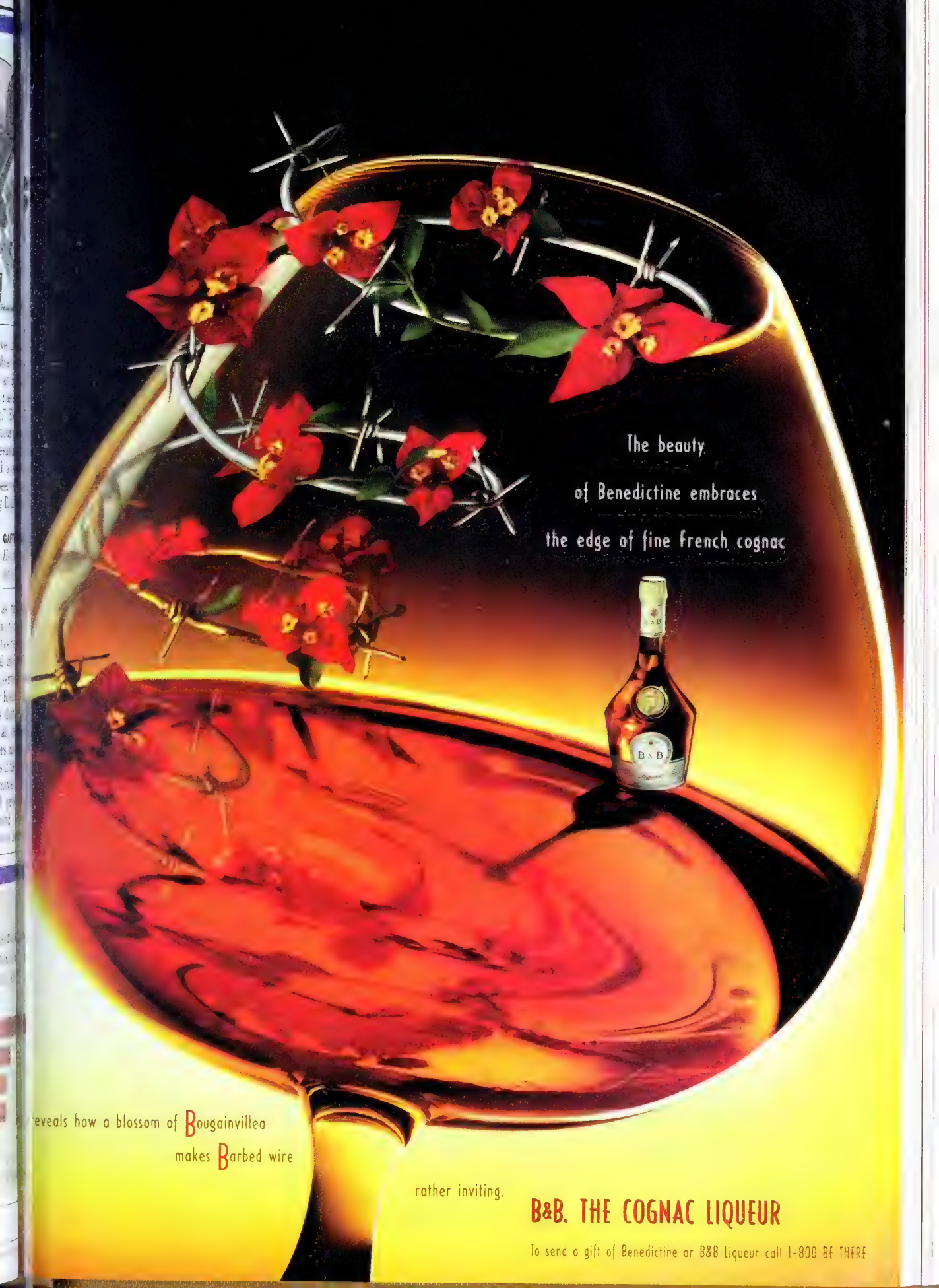
THE BIG PICTURE

A TAXING SITUATION

The "Asian flu" hurts. But it's not the only fiscal malady in the Pacific Rim. Steep maximum personal tax rates in some U.S. trade partners also add to the pain. An corporate tax rates aren't much better.



FOOTNOTES Commercial bankers' representation on U.S. boards of directors in 1973: 55.4%; in 1998, 20%



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RECTIONS & CLARIFICATIONS

Patagonia sticks to its knitting" (Mar. 3, Dec. 7), rival Moonstone Mountain Cement Inc. was incorrectly identified.

"n" (Special Report, Nov. 30) should have stated that government and university research makes up 65% of basic research spending in the U.S., not 64% of total research spending.

"We come a short way, baby" (Social Issues, Nov. 23) stated incorrectly that Morris Cos. has no women among its corporate officers. It has four. Cat-which compiled the data, says a clerk altered the information.

debt. This repayment schedule also reduce the amount necessary to be paid through payroll taxes.

Frank C. Haugh
Fairview Park, Ohio

payroll tax should be extended at all wage income. While eliminating the regressiveness of the current tax, this would allow a cut in the tax yet maintain the same amount of revenue. If the tax were applied to income instead of just payrolls, the tax would be cut still further. It could be fine-tuned to lie somewhere in the middle; say, applied to all income in excess of the first \$100,000 or in interest, dividends, and capital gains. This would be one tax cut that would benefit the poor and the middle class rather than the wealthy.

Lawrence Brusher
Houston

not radical surgery? The only way to address this debate is to give the decision-making back to the individual and allow people to make decisions about their lives. A good example of a retirement plan that works is the municipal employees of Galveston, Tex., who in the early 1980s were given a choice to leave Social Security or a private plan. The alternate plan works like the Social Security system but invests money in annuities of choice companies. This provides a higher growth rate and a higher standard of living for the retired employees.

Graff L. Kennelly
Royal Oak, Mich.

CULTURAL IMPERIALISM? NO, IT'S A BLESSING

"Cultural imperialism' is no joke" (Economic Viewpoint, Nov. 30), Jeffrey Green states that "America's

lifestyle and ideas...are often destabilizing abroad." In many cases, the opposite seems to be true. For example, U.S. television channels abroad (from CNN to Nickelodeon) carry a wealth of free information.

For many countries, this coming generation will be the most educated ever (and I don't mean only in the formal schoolbook sense). Dictatorships can't flourish for any length of time in countries that have a high level of education. After being involved with Latin Amer-

ica for 17 years, I have seen more personal freedom flow from the wealth of information.

Marcelo Salup
Miami

WOMEN'S WORK PAYS LESS BECAUSE IT'S LIGHTER

In "What gets lost in the gender gap" (Up Front, Nov. 30), you compare two jobs that you characterize as equivalent but gender-specific. In fact, the jobs

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Readers Report

of stock clerk (male) and office clerk (female) are quite different. The office is usually cleaner and more temperature-controlled than a warehouse. The lifting requirements are much higher for the stock job. If they were truly equivalent, the office workers would jump ship to warehouse work and balance out the wage differences.

It has been a reality throughout history that men take the jobs with greater risks and, as investors understand, greater risk leads to greater rewards. So it is that our trash collectors with their high rate of injury get paid more than people who file and type. Either is free to switch to a safer but lower-paid job or higher-paying riskier job. If the underpaid office worker of your example really wants to outperform the wage market, let her learn programming or otherwise raise her skill level.

Robert Klusener
Fresno, Calif.

THIS 'TALK SHOP' WAS EFFECTIVE WHEN AUTOCRATS RAN IT

It seems disingenuous to characterize the Asia-Pacific Economic Cooperation (APEC) summit as "an ineffective talk shop" ("Tough love: Just what Asia needs," International Business, Nov. 30). For most of the 1990s, these gatherings were used by multinationals, policymakers, and the region's autocratic leaders to ballyhoo the "East Asian miracle." Your publication—far better than most in this regard—made only an occasional nod in the direction of criticism from worker's rights groups, environmentalists, or civil-society proponents.

The APEC meetings were a great chance for crooks like Suharto to look statesmanlike and reform-minded. We'll never know how many investors had their suspicions allayed by such theatrics.

Jeffrey Ballinger, Director
Press for Change
Cambridge, Mass.

THE CURE CAN BE WORSE THAN THE DISEASE

In the dispute over the drug deferiprone (LI), we believe that the victims are the patients ("The doctor vs. the drugmaker," Science & Technology, Nov. 30). Patients with thalassemia major are kept alive by blood transfusions every two weeks. These transfusions cause dangerous levels of iron. Patients have one drug that extends their life by removing excess iron levels before

the effects of iron toxicity cause shutdown and early death.

The current drug available requires painful injections over a 12-hour period daily. The truth is that most patients give up on this treatment and succumb to an early death because administration of the drug is so difficult.

Issues regarding confidentiality in drug development are intellectually intriguing. However, the lingering reluctance regarding deferiprone has not addressed the need for an alternative treatment. We fear that the acrimony and defensiveness has divided the people most able to address these concerns and offer a consensus regarding the viability of potentially life-saving treatment.

Ronald Ieraci
National President
Cooley's Anemia Foundation
Flushing, N.Y.

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BY ROBERT KUTTNER

A DIRTY LITTLE SECRET: MANAGED CARE IS BAD FOR BUSINESS



RIGHT CURE:
Thanks to an aging citizenry and high-tech marvels, medical costs keep soaring. It's time for companies to back universal insurance

After remaining surprisingly level since 1993, business health-insurance premiums are rising again. The 1999 rate increases are coming at between 5% and 25%, with smaller businesses hit the hardest. What happened?

First, the easy gains of managed care have been realized, and these cost savings were evidently a one-time break. After you have cut hospital days to the lowest level in the industrial world, there remain some conditions that just don't lend themselves to outpatient care. Cancer, heart disease, AIDS, stroke, and the other killers remain expensive to treat no matter how astutely you manage care.

Managed care has already cut psychiatric benefits to the point where a patient virtually needs to be violent, suicidal, or homicidal to be hospitalized. The talking cure has been replaced by pills, but the pills aren't cheap. HMOs have cut access to other specialists to the bone. Yet managed care or no, sick people still need doctors.

WONDER DRUGS. In addition, the two underlying drivers of medical inflation show no signs of abating: an aging population and new technology. People keep living longer, and oldsters incur rising medical costs. Science keeps inventing marvels, whether elaborate surgical techniques, sophisticated new medical devices, or wonder drugs.

Some of these, such as less-invasive diagnostic procedures and surgeries, sometimes save money on a procedure-by-procedure basis. But with more people getting more procedures, the net effect of new technology is to add costs. As recently as the 1950s, the treatment for something as serious as a heart attack was bed rest, painkillers, and maybe anticoagulants. Today, cardiologists have an entire arsenal at their disposal—surgical, pharmaceutical, and high-tech. All of this costs money, and with over 70% of Americans getting insurance from employers, business ends up bearing most of the expense.

The fastest-growing source of medical inflation is drug prices. The legendary profitability of the biotech and pharmaceutical industry is rooted in ever more pricey drugs. Insurance plans are limiting what they'll pay for such expensive and arguably "recreational" new drugs as Pfizer Inc.'s Viagra. But for every elective drug for complaints like lackluster sex or baldness, dozens of new drugs address such unimpeachably clinical condi-

tions as cancer, heart disease, and AIDS. If insurers won't pay to enhance your life, new life-saving drugs will continue to raise insurance costs.

The U.S. is in many respects more vulnerable to health-care inflation than countries with universal health coverage, which relies more on market competition than Europe or Japan. But in the case of health care, paradoxically, market forces may add to inflation more than they restrain it.

We have layers of middlemen marketing insurance products, engaging in medical underwriting, targeting low-risk populations, second-guessing doctors, promoting mergers and acquisitions, and, of course, pursuing profits. We have duplicative, proprietary systems of record-keeping and treatment protocols that ought to be public goods. The U.S. system, uniquely, is ratcheting down actual care in the name of cost containment, while health entrepreneurs add layers of costs.

The lack of a universal health system means we pay the world's highest pharmaceutical prices. Other nations use their national health services to negotiate steep discounts. America pays retail. U.S. businesses, consumers, and taxpayers, in effect, subsidize the cheaper drug prices overseas. The drug industry remains fiercely opposed to the inclusion of drug benefits under Medicare for fear it would cut prices and profits. With less than one-fourth of the population having drug coverage, millions who benefit from the new miracle drugs are getting them.

The consumer backlash against the piecemeal managed care and consumer fears of losing insurance through job changes bring vocal demands for regulation. The insurance industry can't block such legislation entirely, but is powerful enough to render it toothless. Much of the ensuing "consumer regulation" doesn't help consumers but is pure paperwork and cost. Little of this operates in universal systems.

On balance, our fiercely entrepreneurial health industrial complex—drug companies, insurers, for-profit HMOs, hospital chains, consultants, risk-selectors, management plan companies, etc.—is actually raising prices and costs for business. When will business wake up, break the odd link between employment and health coverage, and support universal health insurance?

Robert Kuttner is co-editor of *The American Prospect* and author of *The End of Laissez-Faire*.



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BY GENE KORETZ

A LESS-THAN-RANDOM WALK

Why some stocks don't shift course

According to efficient-market theory, stock market movements are essentially random. That is, stocks tend to show no predictable pattern from day to day, month to month, or even moment to moment because new information is instantly reflected in share prices.

Notwithstanding the general validity of this theory, however, analysts have found a number of market anomalies that suggest that the market is less than perfectly efficient. One of the most notable is the so-called momentum effect—the fact that high performers over a six-month period, for example, tend to continue to outperform the market in the subsequent

ple, they found that buying recent winners (the top 30% in performance) and selling losers short (the bottom 30%) produced a cumulative return of 8.3% in six months. For stocks in the \$500 million range, the six-month gain was 5.3%. But for stocks with a market cap over \$5 billion, it approached zero (chart).

Since analyst coverage directly affects information flow, the authors also predicted that momentum strategies would pay off more for stocks followed by relatively few analysts. Indeed, taking company size into consideration, they found that such strategies for low-coverage stocks had a cumulative return of 15% after 12 months, and 20% after two years—far larger than the return for high-coverage stocks, which peaked at less than 10% after 12 months.

Finally, the study found that poorly covered past losers tended to decline further than poorly covered past winners tended to rise. “Companies are a lot less eager to let bad news out than good news,” theorizes Stein, “and lack of analyst coverage probably helps them keep it under wraps.”

Should one pursue momentum strategies? Given high transaction costs and the complexities of selling short, Stein doesn't recommend it for individual investors. But it's clear that if you're intent on buying recent past winners, your chances of making a big score are greater if you avoid large-cap stocks.



6-to-12 months while losers continue to lose ground.

What's responsible for the momentum effect? Some observers claim that the notion that the market responds immediately and fully to new information is highly exaggerated. They argue that prices tend initially to underreact to changes in corporate fortunes because new information may actually be diffused slowly to the investing public.

In a study of U.S. stocks from 1980 to 1996, economists Harrison Hong of Stanford University, Terence Lim of Dartmouth College, and Jeremy C. Stein of the Massachusetts Institute of Technology offer evidence backing this view.

Figuring that information about smaller companies gets out more slowly than news about large companies, the researchers predicted that momentum effects would be far larger among smaller-cap stocks. And that's exactly what they found. For stocks with a market cap averaging \$100 million, for exam-

Why is this happening? Noting that general practitioners are in high demand throughout the U.S., Escarce and his fellow researchers theorize that many are seeking to avoid HMOs because of the cost-control pressures they impose on primary physicians. And new specialists may be relocating because they have been particularly successful in curbing demand for their services.

The RAND study looked only at large metro areas. But the results offer a hopeful prospect that continuing growth in such areas could result in more new docs hanging their shingle in smaller cities and rural locations.

U.S. COLLEGES LOOK OVERSEAS

Hot rivalry for foreign students

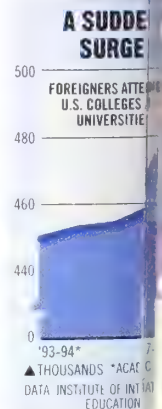
Are economic troubles in Asia, the first surfaced in the middle of the year, hurting foreign enrollment in colleges and universities? At first glance the answer appears to be no.

The Institute of International Education reports that the number of foreign college students in the U.S. jumped 5.1% in the 1997-98 academic year, after four years of negligible growth (chart). What's more, the contingent from Asia, who account for 64% of the total, rose by 6.4%.

The rise is welcome news to U.S. colleges and their communities. Total annual outlays for tuition and expenses by foreign students exceed \$7.5 billion, making higher education the nation's fifth-largest service export.

While the U.S. is still the first choice of foreigners studying abroad, government and academic officials have worried that it may be losing its competitive edge.

Since the 1980s, the U.S. share of international students has fallen from 40% to 30%, and many other countries have stepped up efforts to attract foreigners. Some observers fear that the latest surge in U.S. enrollments may be less a reflection of renewed foreign interest than of students extending their stay because of poor conditions at home.



NEW DOCS SEEK GREEN PASTURES

They're shunning areas with HMOs

Health officials have long bemoaned the fact that new doctors tend to choose to practice in large, relatively affluent communities, with the result that many smaller towns and rural areas are often undersupplied. Now, changes in the health-care market itself may be starting to cure the “maldistribution” of doctors.

According to a new RAND study, the growth of health-maintenance organizations is shifting the locales where new docs decide to practice. At the start of the 1990s, reports Jose J. Escarce of RAND, newly graduated general practitioners tended to locate in large metro areas where HMOs were well established, while new specialists chose metro areas regardless of HMO presence. By 1994, however, new generalists and especially specialists tended to locate in metro areas with low HMO penetration.

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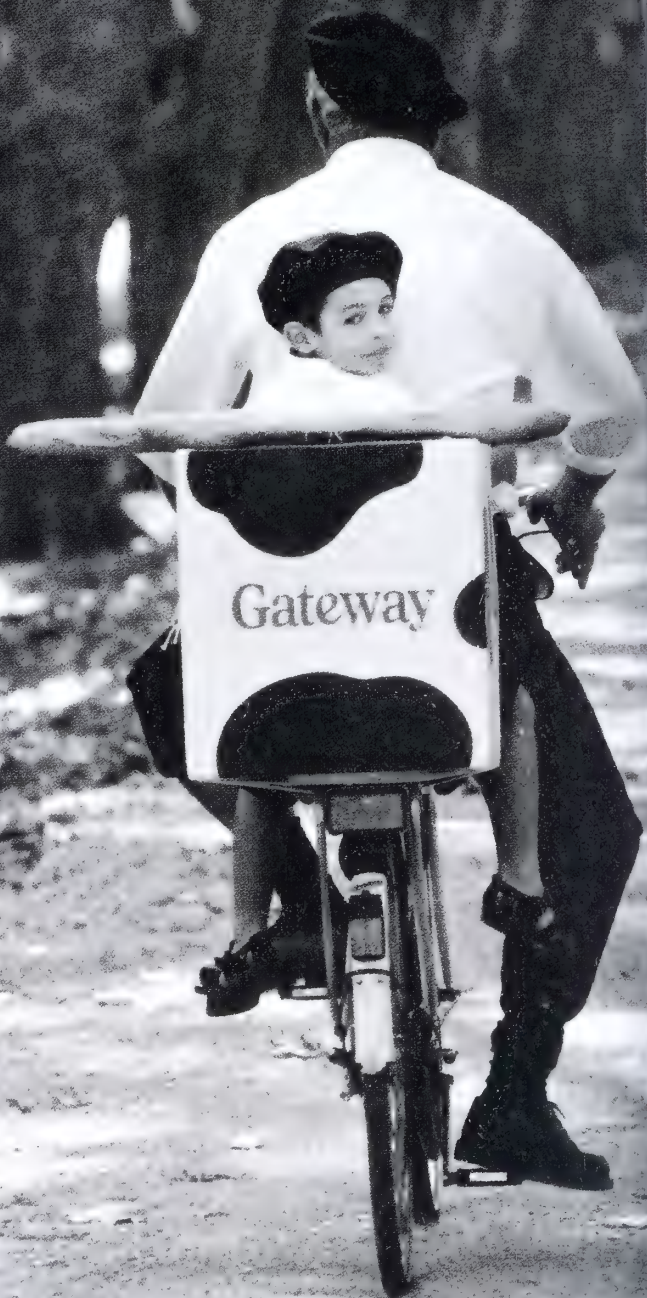
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BY STEPHEN H. WILDSTROM

SMALL OFFICES, BIG-TIME PHONES

Siemens' multiline, cordless system offers a lot of features for the buck

Personal computers, personal copiers, laser printers, and a host of other high-tech tools let even the tiniest businesses seem much bigger than they are. But phone systems remain a problem, with small offices, especially home offices, often having few options between residential gear and expensive systems designed for the big guys.

A new system from Siemens Wireless Terminals (972 997-7300 or www.siemens-wireless.com) can help bridge the gap. It can handle two outside lines and up to eight extensions. And because it is cordless, the Gigaset 2420 requires no new

er cordless phones. (The 2.4 GHz systems are available only in North America, but Siemens sells a Gigaset with similar capabilities in Europe.)

The Gigaset 2420 consists of a sleek black base station that doubles as a speakerphone and answering machine, plus one wireless handset, for \$395. Additional handsets are \$125 each.

A call coming in on either line can be answered on any extension, and caller ID information, if available, shows up on LCD displays on both the base station and the cordless handsets. The handsets also have full access to answering-machine messages for each of the two outside lines. The base includes a port to plug in a modem or fax machine. If you subscribe to distinctive-ring service from the phone company, fax or modem calls will be directed to the appropriate device without ever ringing on the phone instruments.

And the system lets people on any two extensions talk to

each other without using an outside line. It's also easy to set up a three-way conference with one or both external lines. Unlike more conventional systems, though, you can't join a call in progress just by picking up an extension—the person who originated or answered the call

must conference you in. Some people will find this a nuisance, others will see it as a nifty privacy feature.

The Gigaset is not without flaws. Its industrial design is more pleasing to the eye than to the arm or the ear. Both I and my wife, who has much smaller hands, found the compact wireless handsets uncomfortable to hold for any length of time. And the sleek, curvy handset on the base station just slides away when you try to prop it between shoulder and ear. Fortunately, both base and remote stations come with jacks for easy attachment of a headset.

KEYPAD KINKS. The base station can hold a dialing directory of 100 names and the wireless handsets 120 names, but, like any phone, entering data using the keypad is painful. Strangely, the wireless units can send directories to each other but cannot exchange such information with the base station.

The data entry would be much easier if the Gigaset had a computer interface, but I think it's better off without one. Consider the Microsoft Cordless Phone System (\$160). This 900-megahertz phone offers voice-activated dialing and caller ID announced in a synthesized voice, but it depends on a PC for all its advanced features. If the computer crashes while you're away, you don't even have an answering machine. Today's PCs simply can't ensure the reliability that we expect of phones.

Relatively minor flaws aside, the Gigaset is a potent and inexpensive system for a small office—or even for a home where you want to make two lines available without a lot of expense or wiring. Here's hoping it's the first of many products that take advantage of the 2.4-GHz band.



USER FRIENDLY:

The Gigaset needs no wiring and can be installed in minutes

wiring and can be installed by anyone in minutes.

The secret behind the system is a chunk of radio spectrum in the 2.4-gigahertz band recently made available for consumer use. It allows several features, including multiple lines and handsets, beyond the capabilities of old-

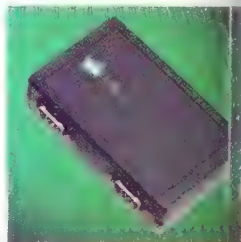
er cordless phones. (The 2.4 GHz systems are available only in North America, but Siemens sells a Gigaset with similar capabilities in Europe.)

BULLETIN BOARD

PC ACCESSORIES

PORT PROSPECTS

The Windows 98 and the universal Serial Bus connectors on most newer PCs can be hooking up accessories a snap. But there's still a serious shortage of USB printers, cameras, and other devices on the market. One solution: the AccelePort USB from International (800 344-4772 or www.dgii.com). The \$99



box turns one USB port into two serial ports and one parallel port and brings them all around to the front of the PC for easy access. It demands, digital cameras, a palmtop sync cradles can be used with the serial port; parallel port only works with printers, but it can free the built-in parallel port on your computer for use with any device, such as a scanner.

NOTEBOOKS

DOCKING SOLUTION

One of the few shortcomings of Apple's G3 PowerBooks is the lack of a docking station to allow easy links to networks, printers, and other accessories. Newer Technologies (316 943-0222 or info@newertech.com) has a solution in the \$240 Book Docking Station. A word of caution: Unlike most Windows notebooks, the PowerBook lacks a single docking connector, making attachment a bit tricky. It also needs to be shut down when docking or undocking, an inconvenient

QUESTIONS? COMMENTS? E-mail tech&you@businessweek.com or fax (202) 383-2125

Paradox:



\$20,495*

It's tough to categorize the 1999 Dodge Intrepid. On the one hand, it has a lease rate that's lean and a price tag that's mid-size. Yet Intrepid offers so much interior space that it's officially recognized as a large car by the EPA. Its standard aluminum engine delivers a stingy EPA estimated mpg of 21 city, 30 highway, yet it generates a stout 200 horsepower. That's more power per liter than any regular-fuel V-6 engine available today. And while Intrepid's ride is supple, its handling is crisp and controlled. Large car, mid-size car, family car, luxury car, sports sedan.

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THE CRISIS OF GLOBAL CAPITALISM

Open Society Endangered

By George Soros

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WILL THE REAL SOROS PLEASE STAND UP

When a good kid goes bad—or when a long-lasting marriage falls apart—the parents, the ex-spouses, and their friends often suffer lengthy periods of remorse, even though they know they couldn't have done much to alter the outcome. Call it the "what-a-waste syndrome."

George Soros, the billionaire hedge-fund manager, experiences what-a-waste on a global scale. In *The Crisis of Global Capitalism*, his third book of financial, political, and social philosophy, Soros identifies a half-dozen recent tragedies that he believes might have been prevented—or mitigated—if political leaders had had the spine and intelligence to act early. These outcomes include the Thai, East Asian, and Russian economic collapses and the wars in Bosnia, Rwanda, and elsewhere. The biggest catastrophe yet will be a deep global recession leading to depression, he warns—unless, by some miracle, governments wake up and face reality. Soros rushed this book into print precisely to sound an alarm.

Whether Soros is right is debatable, and what he would do to prevent such a dire outcome is even less clear. He sees the recent rally in global stocks from their August lows as a bad sign—as misleading as the two "false dawns" in Asia that preceded it. With economies in Asia, Latin America, and Japan still sinking, "the disintegration of the global capitalist system will prevent a recovery," Soros writes.

Soros believes the financial strait-jacket slapped on Asian nations by the International Monetary Fund made things worse. Seeing the IMF as discredited, he favors a new loan-guarantee fund of \$150 billion or more, run by the major Western countries and Japan, that would infuse ruined economies with fresh resources. He would also experiment with currency boards, exchange

controls, and tougher regulation of national banks to curb currency speculation. In an offhand way, though, he suggests that none of the above is likely to win political support—effectively canceling out his policy prescriptions.

Abstract and exasperating as this book is, it is also worth sticking with, both for a brilliant narrative of what went wrong in Asia, Russia, and other emerging markets and also for some challenging, perhaps kooky, intellectual leaps for which he's willing to risk ridicule.

Deciding which Soros you're reading, however, can be a challenge. There is Soros the billionaire hedge-fund boss, whose *realpolitik* answer after shorting the British pound in 1992 and the Thai baht in early 1997—and cleaning up on both—is: If I hadn't done it, someone else would have.

There is also Soros the monetary statesman, who dashes off op-ed pieces and dials up Treasury officials around the world, offering advice about how to avert disasters in markets where his funds are major players. There is the stop-me-before-I-kill-again Soros, who pleads hard for tough controls and regulation of the very hedge funds and markets in which he makes his living.

Then there is Soros the philanthropist, a figure who wins acclaim in the West for spending millions to establish foundations that back democratic reforms in Central Europe and Russia. And there's Soros the radical, who riles Americans with his funding of right-to-die initiatives and medical-marijuana legalization.

Inconsistent as it sounds, there's an underlying logic to all this activity. Soros

fears that markets have so usurped the role of political leaders that government is on automatic pilot. Consequently, he says, there are no strong leaders willing to risk troops or money abroad to end off wars and economic collapses. Meanwhile at home, the leadership vacuum allows social intolerance to rise. And other results, drug use is criminalized when it should be treated as a medical problem. (What a waste.)

This isn't only theory, of course. It's well known that U.S. Treasury officials shied away from bailing out Thailand both because they thought it was too important and because they didn't want to take a bruising from Congress. In his recently published *A World Transformed*, a memoir written jointly with U.S. National Security Adviser Brent Scowcroft, George Bush makes it clear that in 1988, U.S. officials were reluctant to take a chance on Mikhail Gorbachev and give him the aid he requested. Suppose Gorbachev had gotten the

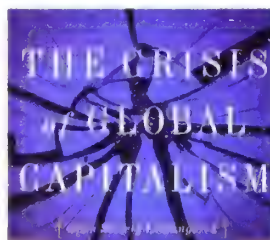
aid he needed for Russian pensioners, Soros says. Suppose a line had been drawn early against the collapse and that NATO allies had told the Bosnian Serbs that no ceasefire would be tolerated. If those actions have had any effect today's disasters?

These are easy questions for a billionaire to look at from the Park Avenue estate house where he runs his money. But they are not for the rest of us. More than \$15

billion in public money has been spent in Asia, to no discernible benefit, and an additional \$42 billion is on deck for Brazil. Would a little politically unpopular preventive spending have been worth the risk? Today, the real battle occurring through coordinated interest rate cuts by Western central banks is development too recent to be mentioned in this book. But if private investors don't return to Asian and South American markets, don't be surprised if the next call is for a Soros-like loan-guarantee fund. That would be costly and wasteful—and preferable to the alternative, a depression.

BY ROBERT J. DOWLING

Dowling is managing editor of *THE NEW YORK TIMES MAGAZINE* and *THE NEW YORK TIMES* WEEK's international editor.



GEORGE SOROS

SPECULATOR, STATESMAN, PHILANTHROPIST—WHICH ONE IS WARNING OF WORLD DEPRESSION?

MES C. COOPER & KATHLEEN MADIGAN

TWO BIG SPEED BUMPS ARE COMING UP IN 1999

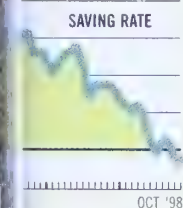
Company savings and falling corporate profits could stall growth

U.S. ECONOMY

Identifying imbalances has always played a key role in economic forecasting, and the 1999 outlook is no exception. Heading into the new year, two disturbing trends stand out because they cannot continue on their present paths and both of them put consumer spending at risk. How those situations resolve themselves will go a long way toward determining the economy's performance next year.

The first unsustainable pattern: Consumer spending is outpacing the growth of household income. That has pushed the personal savings rate below zero for the first time in the postwar era (chart). The negative savings rate means that consumers are now spending slightly more than 100% of their aftertax income, as market gains supplant traditional savings, and as credit borrowing speeds up again. The recent rebound in stock prices and the strong November employment report only reinforce this kind of extravagant consumer behavior.

SAVING RATE



AMERCE DEPT. BUSINESS WEEK

Consumer spending in 1998 will grow in excess of 5%, including what appears to be at least a 4% pace this quarter. That increase coming so far into an expansion is unprecedented in the postwar era. Such a growth rate has been exceeded only in the years immediately following a recession, and it has come in handy in 1998, when the rest of the

economy was beset by falling exports and growing domestic unease. This year, consumer spending will account for almost all of the overall growth in the economy. The other one-third of gross domestic product growth will come from elsewhere.

WHAT HAPPENS to economic growth in 1999 if job growth or weaker stock prices cause consumers to save more—and spend less? That's where the unsustainable trend comes in: The revenues earned by overall output have fallen well behind the cost of providing wages, salaries, and benefits to employees. That's why corporate profits are falling, and they will sag further as long as revenues and costs continue to diverge.

A new round of layoffs making the headlines re-

cently shows that Corporate America is already pushing to restructure itself back to profitability—and to ease investors' growing concerns about 1999 earnings. Faced with weak pricing and slower economic growth, executives know that the restoration of profitability will not come from the revenue side.

Instead, businesses will be forced to rein in their labor costs. During the past year, the total wage bill paid out by companies has grown 6.3%, while the dollar value of GDP has risen by only 4.5%. A split of that size—partly reflecting weak growth in prices—has almost never been seen except in a recession, which highlights the depth of the current profit problem facing businesses.

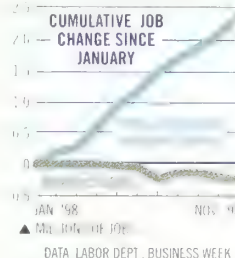
THE NOVEMBER EMPLOYMENT REPORT shows why consumers are still on a tear. But it also points to some moderation in 1999 spending, as businesses are already starting to pare their labor costs. Industries added 267,000 workers to their payrolls last month, many more than expected, and the jobless rate dipped to 4.4%, from 4.6%. Moreover, the Labor Dept. revised upward its earlier measures of September and October payroll gains by a combined 44,000, to show increases of 172,000 and 145,000, respectively.

Even so, payroll growth is slowing. Job gains so far in the second half of 1998 have averaged 205,000 per month. Growth is still strong, but it's down from 244,000 per month during the first half. Moreover, the November increase may have been exaggerated upward by the mild weather. Construction employment increased by 47,000, more than double this year's average monthly pace of 23,000.

Manufacturing continued to lead the job weakness. Factories shed 47,000 workers in November, bringing losses in manufacturing jobs since March to 245,000 (chart). As companies follow through on their recent swell of layoff announcements, manufacturers will continue to shed jobs in coming months, and some service-related payrolls, especially in finance, will see fewer new hires as well.

Slower job growth will hit the economy at a bad time. Consumers will be crucial to the outlook next

WHO'S HIRING, WHO'S FIRING



year, because other sectors aren't likely to add much to growth. Housing already is beyond its demographically sustainable level. Exports are expected to remain weak amid global softness. And capital spending will slow, perhaps substantially, because of sagging profits, excess capacity, and tighter credit conditions.

SLOWER JOB GROWTH isn't the only consumer fundamental sure to soften next year. Household finances may also look less sturdy. That's because consumers' four major sources of cash—income growth, huge stock market gains, mortgage refinancing, and borrowing—won't flow as strongly as they have in 1998.

Real aftertax income, for instance, will be up about 3% this year—an excellent pace, even though it's way behind spending. However, with companies rethinking their work forces, labor shortages will ease next year. And as job growth slows, so will wage gains. In fact, hourly wages in November were up 3.8% from a year ago. While that's good, it's below the 4.4% rate hit in April. If GDP growth slows to less than 2% in 1999, job gains will likely average only about 100,000 a month, and income growth could soften to an anemic 2%.

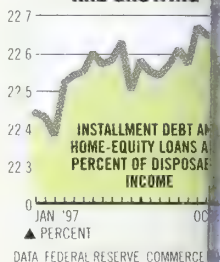
Moreover, the poor outlook for corporate profits means that double-digit advances in stocks next year are not likely. Households had been using equity gains to supplement their savings. As long as stock prices soared, consumers felt they could save less—or not

save at all. The stock market's impact on consumer spending is clearly evident in the recent savings. Since the end of 1996, the savings rate has fallen from 2.6% to -0.2% in October. That reduction in savings accounted for about one-third of the increase in consumer spending during that time.

That leaves borrowing as a catalyst for spending. And consumers do seem to be ending 1998 on a credit binge. Installment debt in October jumped \$9.7 billion, the biggest gain in nearly two years. In the meantime, homeowners are also tapping into home-equity loans. Together, these two forms of credit outstanding—installment and home loans—are equal to a record 22.7% of disposable income (chart). For now, household finances remain in good shape, but they will stay that way only if job growth and the stock market remain healthy.

So the outlook for 1999 is very much a caution. Businesses will have to shore up their profits by cutting labor costs, but those efforts will fall back on the main engine of 1999 economic growth—consumer spending. As a result, cost-cutting may end up cutting revenues as well.

CONSUMER DEBT BURDEN ARE GROWING



JAPAN

THE POLITICIANS HAVE NO TIME TO LOSE

Japan's economy falls deeper into recession while government officials squabble about a stimulus package. And despite interest-rate cuts around the world, Japan has almost no room to lower rates.

Real gross domestic product fell 0.7% in the third quarter from the second, or 3.6% from a year earlier. It was the fourth consecutive quarterly drop, the worst performance in the postwar era (chart). Companies cut investment by 4.6%

from the second quarter as profits fell, consumer spending dropped an additional 0.3%, and housing plunged 6.2%. Prices economy-wide were unchanged for the quarter.

Worse still, the fourth quarter

is not looking any healthier. In October, household spending declined 1%, and industrial output fell 8% from a year ago. The unemployment rate edged up to 4.3%—low by most nation's standards, but unthinkable high in Japan.

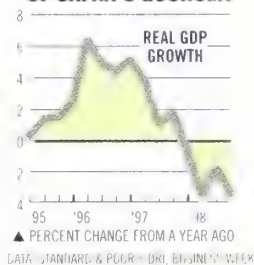
Finance Minister Kiichi Miyazawa has acknowledged the economy will fall by more than the government target of a 1.8% drop for the fiscal year ending in March, 1999. And Economic Planning

Minister Taichi Sakaiya said the economy may shrink further in the 1999 calendar year. Miyazawa has also said the Bank of Japan will not respond to the Dec. 3 cut in European interest rates. Little

wonder, since the BOJ doesn't have much more to cut. Its discount rate is a record low 0.5%, and the overnight lending rate is 0.25%.

Given such bad news all around, one would think policymakers would be rushing to jump-start domestic demand. Instead, the ruling Liberal Democratic Party is fighting with the Liberal Party. The LDP has proposed a stimulus package of 24 trillion yen (about \$200 billion), which includes a 1% income tax cut and gift coupons to pump up consumer buying. The opposing Liberals have countered that a cut in the sales tax is crucial to lifting spending. They want to abolish a securities-transfer tax and offer breaks for home buyers. Parliament isn't expected to discuss the LDP's plan until January. In the meantime, Japan's economy continues to

THE SORRY STATE OF JAPAN'S ECONOMY





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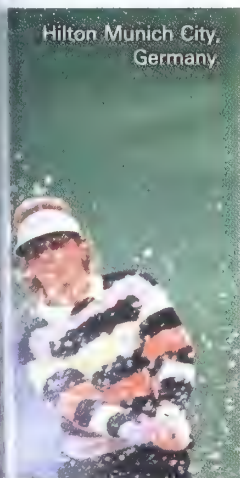


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THE GLOBAL ECONOMY

DEJA VU?

Roadblocks to reform mean the worldwide financial crisis won't go away anytime soon

The scenario has become depressingly familiar. Emerging-market nations, their economies crippled by debt, start to spin out of control—currencies plunge, stock markets crash, foreign investors flee. That triggers sell-offs in bourses around the world and pushes up interest rates on all sorts of borrowing. Then, the International Monetary Fund and other financial institutions of the industrialized nations swing into action, stitching together loan packages and dictating reform plans to stop the panic. Investors, figuring the worst is finally over, plunge back into emerging markets—only to run into a wall of reality.

Is the cycle restarting now? In the past few weeks, reminders that the global economy is still in perilous shape came in rapid succession. Brazil's legislature rejected part of an austerity plan tied to a \$41.5 billion IMF deal designed to prevent a meltdown. In Moscow, leaders launched a desperate bid to avert a default on foreign bonds that would send its already shattered economy deeper into the abyss. In Caracas,

the election of a populist president raised fears that teetering Venezuela may be the next IMF basket case. In their wake, stock markets from the U.S.—where new highs had been set—to Asia and Europe staged prudent retreats.

On Dec. 1, Boeing Co. reminded Americans that, despite the continuing strength of the U.S. economy, they are not immune to Asian contagion. Facing a slew of canceled orders from Asian carriers, Boeing says it will face weak earnings growth for the next five years and will lay off more workers as a result (page 39).

Suddenly, it's clear how little has really changed in the nations battered by the global maelstrom. The easing of monetary policy in the West and reform in Japan did quell global financial panic and eased worry that the entire world will slide into re-

cession next year. With luck, many economists believe, most emerging markets should be ready to grow again in 1999.

But first, there's 1999. The Asian economy is still balancing precariously on the edge, and another shock could easily push it over. There is no doubt around the fact that cleaning up the finances of Japan, South Korea, Brazil, and other crisis countries will be a long, tortuous, and expensive process. What's more, new roadblocks from local politicians, companies,

bureaucrats will inevitably arise. U.S. sputters, Zurich Group economic strategy David D. Hale, "This year has the risk of being the worst for the world economy since World War II."

The global economy won't make recovery any easier either: for oil, copper, and other commodities

WIDENING AGAIN





big as last year's Asian debacle, which erased \$150 billion in consumption and hammered America's manufacturing sector. "There is room for no complacency at all," he says.

That makes the outlook for the coming year grim. Enormous swathes of the world—36 countries in all, according to the World Bank—are already in recession. Latin America should finish 1998 with regional growth of just 2.4%, and may contract by 0.8% next year, predicts J.P. Morgan. Brazil's economy may shrink by 4.3%. Venezuela is also on the edge, facing a \$5 billion budget shortfall next year, a currency that may be overvalued by 40%, and still-dropping oil prices. Yet President-elect Hugo Chavez has talked about hiking wages and agricultural subsidies and halting privatization of state-owned industries.

In Europe, many analysts expect Britain to slide into recession, while

already down 23% since May, are likely to keep dropping in 1999. Meanwhile, the aftershocks of Asian and Russian collapses still credit to most developing nations, their ability to roll over hundreds of billions in foreign-currency and export their way back to

IR SHOCK? True, the severe squeeze of September and October eased for emerging markets. "Only prime borrowers are getting money," notes Uri Dadush, the bank's chief economist for developments, "and only at spreads that are two or three times higher than they would, even in the U.S. spreads." Treasuries and high-risk bonds recently crept back near their pre-scare height of the liquidity scare. Treasury bonds sold three months ago now trade at 10 basis points above the most recent issues, against a background of tight liquidity.

Capital flows are severely squeezed this year, Dadush warns, emerging markets could suffer another shock as

Germany is now projected to grow a mere 1.7% as exports to Asia drop. Then there is Japan, which is poised to enter its third year of recession after an estimated 2.5% contraction in 1998. Tokyo's lavish public spending program is not expected to greatly boost consumer spending, and many analysts doubt that its \$500 billion bank-recapitalization scheme will resolve Japan's debt crisis.

About all the U.S. and Europe can do is cut interest rates again. But the Fed and the new European Central Bank will be reluctant to do that unless their own economies start slowing—which would be bad news for everyone.

So in reality, the world's policymakers can only hope that the crisis countries stick to reforms—and pray that nothing else goes wrong. If developments in Brazil and Russia are a harbinger, 1999 will be another year of living nervously.

By Pete Engardio in New York, with Christina Hoag in Caracas and Peter Coy in New York

BRAZIL: ON THE BRINK

Resistance to budget cuts
is only making things worse

Brazil, the domino that could determine whether emerging-market malaise will spread to the rest of the Western Hemisphere, is once again on the edge. On Dec. 2, close to two months after President Fernando Henrique Cardoso was reelected and a substantial Brazilian rescue package was negotiated, its unpredictable Congress rejected a key part of Cardoso's proposal to reduce the 1999 budget by \$23 billion.

The aftermath was ugly, if predictable. The news out of Brasília pushed stock markets from New York to São Paulo lower. The message to investors was clear: Brazilians, already feeling pinched, aren't eager to accept the austerity measures needed to reduce government deficits.

But unless the nation enacts budget reforms, it may not see all of a \$41.5 billion aid package from the International Monetary Fund, which includes \$14.5 billion pledged by 20 other countries. And those funds are critical: While the first installment of \$5.3 billion in IMF money is available, the national reserves have already fallen drastically—to \$40 billion, from more than \$70 billion in July. And capital continues to trickle out despite real interest rates of more than 30%.

In fact, the tight-money policy that



UGLY AFTERMATH

When austerity measures to reduce Brazil's deficit were voted down, the markets were spooked

was designed to attract investment is instead suffocating the economy. It is inflating the \$295 billion public-sector debt and \$65 billion deficit. As debt payments rise early next year—to as much as \$8 billion a quarter—reserves will come under increasing pressure. Ernest W. Brown, a Latin America economist for Morgan Stanley Dean Witter in New York, has warned that if reserves drop much below \$40 billion, investors should assume that “a substantial devaluation and new inflation are both likely.”

Financial markets from Thailand to Turkey could be affected if a Brazilian crisis prompts a new flight to quality. And Brazil's trading partners will suffer. Although its own fundamentals are strong, Argentina's gross domestic product is expected to grow just 1% in 1999 because of its trade with Brazil.

“BAD TASTE.” U.S. investors who came back into Brazil's equity and debt markets after the IMF deal was announced in November “are disgusted,” says Walter Stoeppelwerth, director of Latin America research for Robert Fleming Securities in São Paulo. The rebuff of Cardoso's proposal to increase the social security contributions of some state workers “has left a very bad taste in everyone's mouth,” Stoeppelwerth says.

The IMF and the Clinton Administration say they weren't alarmed by the recent setback. In fact, they hope the negative market response could serve as a bracing tonic to Cardoso and the government there. “They've been put on notice that reform isn't going to be easy, but it is essential,” says an administration official. The second tranche of IMF money—\$4.5 billion—is scheduled to be granted in February. That money can be advanced at Brazil's request, but it can also be postponed or withheld.

For now, nobody is writing off Brazil. Foreign direct investment totaled \$24 billion in the past 12 months, although investment is expected to fall in 1999 to \$17 billion. On Dec. 8, J.C. Penney Co. announced that it would pay \$33 million for department store Lojas Renner. A few days earlier, French carmaker Renault opened a \$1 billion plant in the state of Paraná.

Will the legislature come up with an IMF-pleasing reform package? Brazil's economy—the world's eighth-largest—has already taken a swan dive. After no growth in 1998, high interest rates are expected to shrink GDP by 4% in '99. Unemployment is at 8% and could hit 12% next year. Given that, it will take extraordinary leadership to convince voters to tighten their belts more.

By Ian Katz in São Paulo

RUSSIA: HOW BAD THIS TIME?

Only massive borrowing will keep it out of default

When the International Monetary Fund organized a \$22.6 billion bailout for Russia last July, experts warned that it would not be enough to get the battered nation through the next several months. They were correct—painfully so.

Five months after the “rescue,” which

RUBLE KEEPS TANKING



was orchestrated in large part by the U.S. Treasury, Russia is floundering—on the edge of another default. The ruble has fallen 14.3% since Dec. 1. Tax receipts are only at 59% of target levels. Revenues from oil—which provide one-third of export earnings—are plunging as world oil prices flirt with \$10 a barrel. And President Boris Yeltsin is ill.

Once again, Russians are frantically exchanging rubles for dollars. The government doesn't have enough money to pay wages. And people are cold and hungry in Russia's far north. “The situation can only deteriorate further until sensible economic policies are put in place,” says Thierry Malleret, chief economist of Moscow-based Alfa Bank.

In other words, Russia is close to where it was last summer when it defaulted on \$40 billion in short-term debt—one-third owned by foreigners—and shook the world's financial markets. And this time, there are fewer places to go begging for new capital and less confidence that Russia can take measures necessary to fix its structural problems.

The reason: Despite the October appointment of compromise candidate Yevgeny M. Primakov as Prime Minister, Russia has not come up with enough

cuts to whittle down its projected \$50 billion deficit. Instead, it is looking to foreign borrowing to help pay for at least part of it. That money may never arrive, at least not without massive strings.

NEW COLLATERAL. The most likely scenario is that Moscow could take out loans with private western banks, collateralized by a commodity. Gold would be easiest, because it is held by the government. Oil and gas revenues are technically the property of private companies, but some deal for them would be impossible. Gazprom and Lukoil already have borrowed money collateralized by export receipts. Says David B. of London-based rating agency IBCA: “The bottom line is that no one is going to lend based on the word of



BUYING BREAD IN MOSCOW

The government doesn't have the cash to pay wages, and with the ruble falling some 14% since Dec. 1, Russians are feeling the pinch.

Russian government. That's not a tiny sum of money at this time. If they are going to borrow from private creditors, they will have to be pretty imaginative.”

Already, the IMF has refused to provide any more money to Russia until it formulates a realistic budget and a plan. But Russia also has asked the IMF to roll over \$4.2 billion in 1999 loans. Without this, Russia's Finance Ministry forecasts that the economy will contract by 5% to 7% next year.

December is a critical month. Russia has asked the London Club of commercial creditors to accept \$360 million in principal payments, due Dec. 2, in the form of bonds rather than in cash. If there is no agreement by Dec. 23, when the grace period ends, Russia will be in technical default—and the markets could be in turmoil again.

By Patricia Kranz in Moscow

WHO WILL STEP INTO JACK WELCH'S SHOES?

grooming and testing a stable of would-be CEOs

is 17 years as Chairman and CEO of General Electric Co., John F. Welch has been revered for his management style and his vision for the company. Can he win the same plaudits the way he handles the choice of a successor?

Welch's choice—if he has one—remains a closely guarded secret. But with the resignation of financial services chief Gary C. Wendt, Welch stepped his hand—a little. Although he wasn't a likely successor, Welch's departure to rejigger some top executives put a handful of

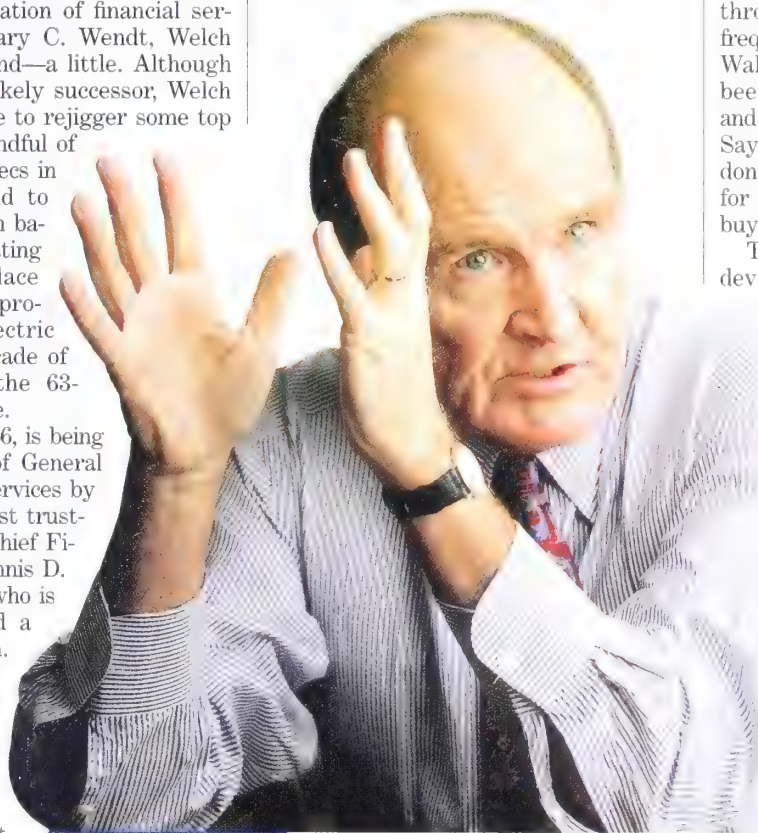
nothing execs in line to ascend to the top. "What I'm balancing is getting people in place who'll ideally prosper in the next decade of the company," says the 63-year-old executive.

Wendt, 56, is being replaced as CEO of General Electric Capital Services by Welch's most trusted, former Chief Financial Officer Dennis D. Dammerman, 53, who is being named a co-chairman. Wendt, 44, is operating GE Capital Corp., was CEO of that company with S. Sherin, formerly head of GE Medical Systems, was given the job to replace Wendt as president for and the new

ough Wendt had to resign, to the company's performance 12 years

as head of GE Capital was nothing less than spectacular. Financial services grew to contribute \$4 billion in net income to GE's bottom line, up from only \$300 million in 1986. Still, Wendt has a reputation as an abrasive taskmaster, whose relationship with Welch has been strained in recent years.

Naming Dammerman, a man Welch



**POSSIBLE
CON-
TENDERS
AFTER
WELCH
RETIRES**

THE FRONT-RUNNERS

| NAME | AGE | TITLE |
|--------------------|-----|--------------------------|
| DAVID CALHOUN | 41 | CEO, GE Lighting |
| DAVID COTE | 46 | CEO, GE Appliances |
| JEFFREY IMMELT | 42 | CEO, GE Medical Systems |
| JAMES MCNERNEY JR. | 49 | CEO, GE Aircraft Engines |

*LIKELY ONLY IF SUCCESSION IS ACCELERATED

THE DARK HORSES

| NAME | AGE | TITLE |
|-------------------|-----|--------------------------|
| DENNIS DAMMERMAN* | 53 | CEO, GE Capital Services |
| ROBERT NARDELLI | 50 | CEO, GE Power Systems |
| DENIS NAYDEN | 44 | CEO, GE Capital Corp. |
| JOHN RICE | 42 | CEO, GE Transportation |

calls one of his most trusted aides, to oversee GE Capital settles any concern over who will head GE's key financial-services business. "You don't want anyone worrying about the leadership of your largest and most important business when the chairman's office is going through a transition," says Nicholas P. Heymann, an analyst at Prudential Securities Inc. "With Dennis there, we won't worry about it at all."

The guessing game about Welch's successor began three years ago, when the CEO announced he would retire at the end of 2000. He put in place a five-year plan to groom and test would-be heirs. Welch's challenge: to avoid political infighting for his job and to minimize early departures by those who figured they wouldn't reach the top.

GOLDEN HANDCUFFS. Welch and his directors have been quietly testing a dozen or so CEO aspirants, rotating them through assignments and giving them frequent exposure to board members and Wall Street analysts. The stars have been awarded sizable restricted stock and option packages to keep them at GE. Says one executive recruiter: "Jack has done a fabulous job of making it easy for them to stay. It costs a fortune to buy many of these people out of GE."

The board's five-person management development and compensation committee, chaired by Silas S. Cathcart, has been meeting with the heads of GE's 11 businesses. "In the last two years," says Welch, "they have been going out on their own—meeting with our teams on their own turf alone. They spend a day and have dinner with all the key leadership. We're getting as many unfettered inputs as you can."

Welch says he has purposely stayed away from these sessions to give direc-

tors a chance to see and assess the company's top talent away from his influence. The committee then writes up its impressions of the leadership teams and forwards the assessments to both Welch and his senior vice-president for human resources, William J. Conaty. "We are all in a very collegial process," says Welch. "It's not an awkward event. It's not like: 'We're coming out to look at you to see if you can be CEO.' They visit every business and every leader. It's an assessment of the whole company and the entire leadership team."

Welch remains tight-lipped about any of the candidates, but analysts, headhunters, and former GE execs are now betting on the men—no women are in the group—who run GE's key operating units. They include Jeffrey R. Immelt, 42, medical systems; David L. Calhoun, 41, lighting; David M. Cote, 46, appliances; and W. James McNerney Jr., 49, who heads the aircraft engine business. McNerney could take himself out of the running if he accepts the top job at Electronic Data Systems, where he is said to be a top candidate. McNerney could not be reached for comment.

TOWARD ASIA. Whoever fills Welch's shoes will be taking on one of the most complex and diverse corporate entities in the world at a time of rising challenge. The company will still be in the midst of a transformation from a manufacturer into a global services company that is focused on capitalizing on expansion opportunities in Asia. The region is fast becoming as critical to GE's growth plans as Europe has been in the past decade.

Welch won't fully show his cards until early 2000, when he may name a pair of vice-chairmen to join him and Dammerman in the corporate executive office. "It would be rough for Jack to go right up to the end and leave a successor with a whole bunch of frustrated potential CEOs," says Dayton Ogden, president of SpencerStuart Worldwide.

But Welch has quietly let a few candidates know that they are not in the running. Most recently, another search consultant noted that one potential contender, whom he declined to identify, called to say he would now be interested in CEO jobs elsewhere.

Welch has every intention of creating a flawless handoff with the least disruption possible. "I want to make this thing seamless," says Welch. "I may not get it done right, but I'm going to try like hell." That should work.

By John A. Byrne, with Jennifer Neugold, in New York



THE ECONOMY

A TALE OF TWO JOB MARKETS

The services industry boom offsets a slump in manufacturing

These are unhappy times for miners, farmers, and factory workers, who are lining up for jobless benefits as the Asian crisis hammers commodity prices and demand for U.S. exports. And more bad news is coming: Boeing plans to ax 48,000 jobs, the Exxon-Mobil merger will eliminate 9,000 positions, and Johnson & Johnson is handing out 4,100 pink slips. Yet jobs go begging at restaurants, retail outlets, and computer service companies.

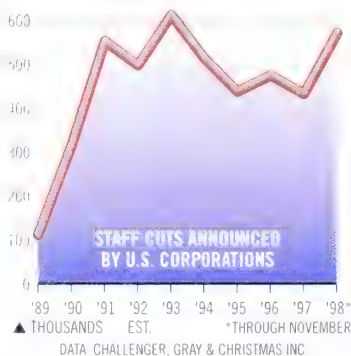
It's a tale of two economies. Manufacturers and financial giants exposed to the turmoil in global markets are hurting, while service industries are working overtime to satisfy booming domestic demand. Factories eliminated 245,000 jobs between March and November:

On Dec. 9, the Federal Reserve's Book said: "Manufacturing activity generally softer, mostly due to declines in export-related industries." Service providers created more than 100,000 jobs in the same span. By the end of 1998, the economy will have generated 236,000 new jobs a month, and workers will

2% rise in earnings per share.

No one expects a 1999 to match the pace. Major U.S. companies are announcing layoffs at a record rate: 100,000 job cuts announced through November. Not the most since according to outplacement firms, analysts Challenge & Christmas Inc. with forecasts 150,000 new month, "1999

UNEMPLOYMENT IS LOW, BUT LAYOFFS ARE UP



year by normal standards," says A. Wyss, chief economist for Standard & Poor's DRI. The jobless rate will ear its current 4.4%, and wages up again, DRI predicts.

ethless, the split between the f American workers exposed to bal tempest and everyone else open. Already, job losses are heavy ther goods (down 8.2% since , apparel (down 7.7%), electrical inery (down 3%), and steel (down %). Boeing may epitomize the sian spillover. The aircraft maker as boosted its planned layoffs for he next two years by 20,000 because orders from Asia declined ad the company needs greater oductivity in its plants. The Boe cuts will reverberate: Northrop nman Corp., which is already cut- 8,700 jobs due to Boeing's cut- last summer and the winding f B-2 bomber production, antici- aying off another 1,100 workers semble 747 fuselages for Boeing.

TIC CUSHION. Some factories are sting "Help Wanted" signs, how- ded, 33% of manufacturers sur- by the Bureau of National Af- ne, spending at home has cush- ie blow from overseas. Dell Com- orp. expects to add 6,000 U.S. es this year. And thanks to a 15 plus annual pace for U.S. sales, kers are also bullish: "We're in a od position to avoid having any nt layoffs," says DaimlerChrysler Robert J. Eaton.

he biggest job gains will con- be in services. The U.S. work- Wal-Mart Stores Inc. is up by 5,000 this year, to 785,000. TJX arent of off-price retailer TJ s staffing up for its new A.J. clothing chain. ACE Cash Ex- c. expects to add 140 storefront shing centers and up to 700 jobs 1999: "People need to cash their and pay their bills no matter appening," says a spokeswoman. ng checks doesn't pay as well abling airliners. But it may be shift toward services isn't as paychecks as had been predict- ome economists. The average on worker in a service indus- ted \$12.50 an hour in Novem- \$13.61 for a factory worker.

fs and job turnover have alen part of the U.S. economy. global turmoil creates a new The worst of times for workers to harsh winds from overseas, of times for those who aren't. *ike McNamee in Washington, nn Muller in Detroit and bu- orts*

AIRCRAFT

BOEING'S REVISED FLIGHT PLAN

Would cuts in management and output rescue earnings?

When Boeing Co. announced on Dec. 2 that canceled orders from Asian carriers would force it to cut back production by 25% starting in 2000, management finally acknowledged publicly what investors had long feared: The aerospace giant's earnings would be one of the biggest U.S. casualties of the global meltdown. What Boeing has yet to disclose, however, is how seriously it is still being victimized by its



own inefficiencies—which won't be solved by its new plan to cut as many as 48,000 jobs by 2000.

The hidden problem: Boeing aggressively priced 737s and other models in the past three years. Earnings from the cash-cow 747 line have in the past compensated for this, but now that Asian orders for 747s have dropped, the narrow margins will show up on the bottom line. In addition, the company's costs have risen because it is building planes more slowly, partly because it has hired less experienced workers. "We have to fundamentally change the way we make planes," Alan Mulally, president of Boeing Commercial Airplanes, told analysts on Dec. 2.

"MUCH LEANER." Mulally now has a plan to do just that. Company insiders say he will propose changes, including increasing outsourcing and reducing the time to assemble parts, at a Boeing board meeting on Dec. 14. He will also propose thinning management ranks as part of the announced layoffs. "I don't think he's talking about something fundamentally different in the design," says Jerry Martin, Boeing's director of process vi-

sion. "It's about the way we conduct the business." Mulally declined to comment.

Even if Mulally's proposal gets a green light from the board, Boeing will face plenty of challenges in 1999. The company would be rapidly modernizing its production practices while assembling a record 620 planes and laying off 20% of the workforce. Moreover, the plan is almost certain to meet with resistance from Boeing workers. The International Association of Machinists is slated for contract talks with Boeing next fall. And Bill Johnson, president of IAM Local 751, says the moment Boeing moves to outsource more, "we will put together a campaign to stop them."

ROADBLOCK. At first, Boeing thought it could shave 25% off the cost of producing airplanes by implementing production improvements such as using lean manufacturing techniques,

adopting more efficient layouts for factory floors, and installing a new computer system. But Boeing's bloated management has stalled many of these plans. "We have too many layers," admits Martin.

More than half of Boeing's 232,600 employees are white-collar workers—but not for long. The company has said that 80% to 90% of the cuts will be in the commercial airplane group. The engineering union expects to lose one-third of its 25,000 members, says

LOSS LEADERS

Some airliners were priced low to win sales away from rivals. The effects are now hitting the bottom line—with a thud

Charles Bofferding, executive director of the engineering union. The machinists union is also bracing for cuts among its 40,000 members. Indeed, part of Mulally's plan is to get suppliers to build more components and use Boeing plants for final assembly.

Even that may not be enough. Boeing must fully reassess the way it does business, say analysts and suppliers. A case in point: A supplier to Boeing and Airbus tried to make a change in an electronics system. The move required just two letters to Airbus—but at Boeing the same change required several meetings and nearly \$1 million in rework and labor. Until Boeing can shed that kind of inefficiency, the company is unlikely to get back to its old cruising altitude.

By Seanna Browder in Seattle

COMMENTARY

By Susan B. Garland

BIG WHEELS KEEP ON SPINNING



**MICROSOFT
ON TRIAL**

folks connected with *U.S. vs. Microsoft*, of course.

With so much at stake for both Justice and Microsoft, the court of public opinion has become as important as the court of U.S. District Judge Thomas Penfield Jackson. Yes, Jackson will decide the case. But also up for grabs are the hearts and minds of Microsoft investors, consumers, a Republican Congress skeptical of the government's antitrust activism, and higher-court judges who eventually will have a say (page 84).

Exhibit A: Microsoft's escalated lobbying efforts on Capitol Hill to stoke opposition to the government's case. Congress is a prime target in the public relations war being waged around this historic antitrust case. During the past year, the company has doubled its lobbying presence in the capital, including hiring two ex-aides from Majority Leader Richard Armey's office (R-Tex.). In the 1997-98 election cycle, Microsoft's soft-money contributions to Republican and Democratic party committees soared to \$525,000, from only \$77,000 during the 1995-96 cycle.

SENATE CHAMPIONS. Antitrust chief Joel I. Klein already is feeling Microsoft's sting. Last June, some Republican senators, accusing Klein of leaks in the case, blocked his request to hike his budget by \$9 million for stepped-up merger reviews. Among the senators: Slade Gorton from Mi-

crosoft's home state of Washington. A month later, GOP Senators Spencer Abraham of Michigan, Jon Kyl of Arizona, and Jeff Sessions of Alabama wrote Attorney General Janet Reno, accusing antitrust officials of encouraging foreign officials to take action against Microsoft. Justice denied it.

On the state front, Microsoft has also scored some victories. On Dec. 7, after meeting with company executives, South Carolina Attorney General Charles M. Condon dropped out of the roster of 20 states that had signed on to the Justice Dept. suit.



MICROSOFT: Mark Murray

company will discuss the case with new AGs. "I expect there will be some re-evaluation," he said.

These new pockets of opposition have not gone unnoticed by the trust-busters. They too have their spin, and it has primarily centered on taking down Microsoft and its chairman, William H. Gates III, a peg or two. Exhibit B: the Justice staffer who rushes down to the TV crews outside the courtroom with copies of Gates's damaging videotaped deposition. Says William E. Kovacic, antitrust professor at George Washington University Law School: "Part of what Klein thinks about is, 'I have a Republican

legislature, and many people want to take away my budget. We have to create the public awareness that this case is worthwhile and that Microsoft is bad.'"

And even in the courtroom, the outside world's perception of the case counts. If Jackson finds Microsoft liable, he'll look to Klein and the Justice Dept. for a recommendation on remedy. How far Klein can go—per-



JUSTICE: David Boies

haps even to suggesting divestiture of some Microsoft businesses—will depend on his support on Capitol Hill. And he will need that backing if he pursues a wider probe of Microsoft's business practices. "Federal agencies always prefer Congress that's sympathetic," says Washington antitrust attorney Donald M. Falk, who represents Oracle Corp. "If there is a heavy outer saying, 'Don't hurt Microsoft,' that could affect what Justice asks for."

And then there's everyone else. Microsoft wants to make sure the public outcry is loud—loud enough for legislators to hear. Its message: The government is out to destroy one of America's success stories. Lately, it has been trying to scare up a "grassroots" movement of software developers and others. Microsoft E-mails them trial updates with the hope that they will pass on these opinions as their own to legislators.

In the end, this case has become as much a battle for image as a battle for justice. But hey, that's the American way.

Garland covers the Microsoft case and the Justice Dept. for BUSINESS WEEK in Washington.

BusinessWeek

COURT

Business Week and Court TV post daily updates at www.businessweek.com and www.courtstv.com. Also, "Microsoft on Trial" airs every Thursday at 7pm E.T. on Court TV.

THIS MVP EXCELS AT EVERY PART
of the game: long-term goals and
today's needs. She can help you build

Most Valuable Planner.

assets for the kids' education while
helping to make sure you have enough
retirement income down the road.

A superstar? Yes. We've got lots of
them. As part of the global AXA
group, a financial services powerhouse
with more than \$530 billion under
management*, Equitable has a full
line of products and services for all
life's opportunities and challenges. Our
representatives hold more dual CLU
and ChFC professional designations
than anyone in the industry. And they're
ready to help. It all starts with a phone
call. Contact us today and we'll put our
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EQUITABLE
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TELECOMMUNICATIONS

TOP OF THE WORLD, MA

AT&T is in the global leagues now, thanks to IBM's network

It's easy to see why AT&T Chairman and CEO C. Michael Armstrong has had a tough time convincing Wall Street that he can turn the telecom giant into a growth company. Revenues inched up a meager 1.5% in 1997, to \$51.3 billion, and are forecast to increase 2% to 3% this year. The reason is simple: Virtually all of the company's revenues are coming from the highly competitive and increasingly less profitable long-distance business. The ultimate insult came in early December when archrival MCI WorldCom Inc. surpassed AT&T in market capitalization, largely because investors think that MCI WorldCom is better positioned in the fast-growing data and international markets.

On Dec. 8, Armstrong's plan to break out of the slow-growth box became clearer: AT&T will acquire IBM's Global Network for \$5 billion. When the deal is completed—probably in mid-1999—the new business will give an immediate \$2.5 billion bump to AT&T's top line.

More important, the deal will give AT&T an international data network and 5,000 employees skilled in managing a vast array of network technologies. That should help AT&T attract telecom business from multinationals and win new outsourcing contracts for managing data networks. "We are now a global player," said Armstrong in an interview after the announcement. "We

have redefined ourselves from a domestic long-distance company into a global communications provider."

The Global Network acquisition caps a remarkable year in which Armstrong has struck several major deals to get a troubled AT&T back on track. In January, he agreed to buy Teleport Communications Group Inc. for \$11 billion to get into local service for the U.S. business market. In June, he said he was buying cable provider Tele-Communications Inc. for \$33 billion to get into the residential local-calling market. Although Armstrong has won plaudits for his bold steps, he is still far from proving that the deals will succeed.

OVERPAYING? The latest acquisition dovetails neatly with a planned joint venture with British Telecom PLC. AT&T and BT had said they would spend \$5 billion to build a high-capacity network in 100 cities; IBM's Global Network already has facilities in 93 of them. AT&T and BT still plan upgrades, but the IBM net will speed up its ability to attract customers. The market AT&T and BT are targeting is tantalizing: \$20 billion to \$30 billion a year and growing 10% to 15% annually, estimates the Gartner Group Inc. And the IBM Global Network "clearly positions us as the market leader in network operations," says Rick Rosecitt, CEO of AT&T's outsourcing unit.

The benefits didn't come cheap. AT&T paid about \$1 billion more for the network, which is burdened by old technologies, than analysts thought it should fetch. "Five billion dollars for a 1980s network is pretty expensive," snipes CEO Michael J. Mahoney of rival Viatel Inc., which is building a new network in Europe.

But Armstrong is stressing the growth opportunity, not the cost. And the Street is listening: News of the deal pushed AT&T's stock to 67, putting its market cap back ahead of MCI WorldCom's.

By Peter
Elstrom in
New York

ARMSTRONG:
"WE HAVE
REDEFINED
OURSELVES"



COMEBACKS

MOTOROLA CONNECTS

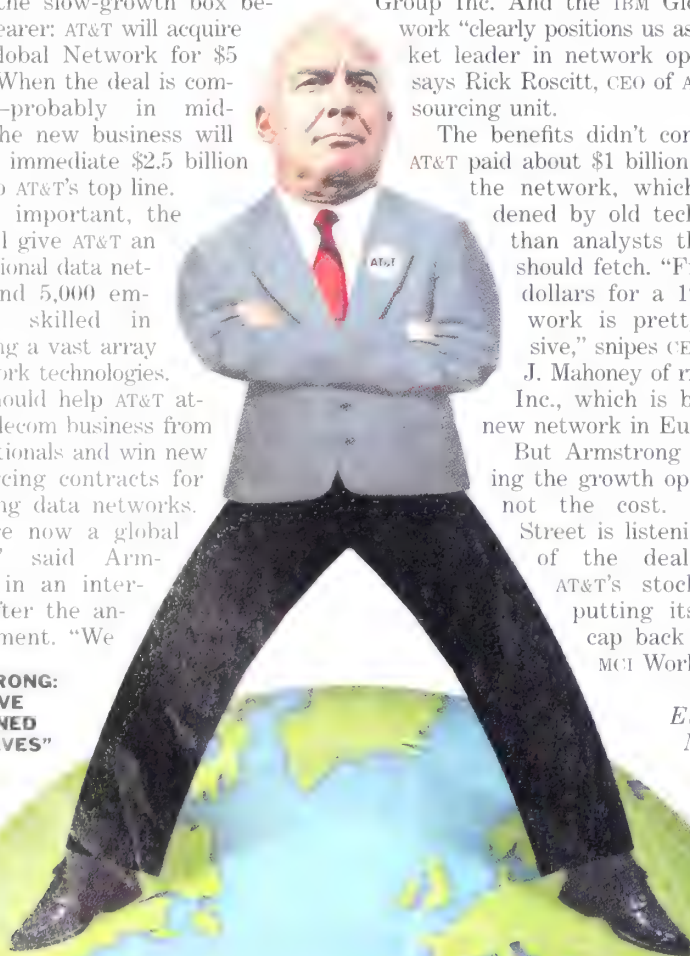
Its digital cell-phone business is finally turning around

Five months ago, Motorola Inc. made a promise: By the holiday shopping season, the time of year when 40% of all cellular phones are sold, its new digital version of its StartAC phone would be on retail shelves. Lo and behold, by Thanksgiving week, the StartAC was there to greet blizzard shoppers.

A few years ago, nobody would have been surprised at seeing Motorola set a goal, then reach it. But that wasn't the company stumbled, particularly in its cell phones. For nearly two years, while rivals were flooding the market with digital handsets, Motorola couldn't deliver.

ASIAN FLU. Hitting the digital target was only one sign that Motorola's Schaumburg (Ill.)-based electronics division may be starting to execute as it did years ago, when it was cited as one of the world's best-run companies. The sources close to Iridium, the Washington (D.C.) global satellite network, launched its service in November, caused a temporary shortage of the handset. And Motorola's far-flung business suffers from Asia's economic turmoil and sluggish demand for semiconductors.

But Motorola has unveiled a new flip phone and two-way pager for



.com

Communications Inc., in addition to the StarTAC and Iridium phones, all in time for Christmas. "We think that was critical," says James P. Caile, corporate vice-president of marketing for Motorola's Personal Communications sector.

The turnaround in digital phones is a major milestone in Motorola's recovery. Even before the latest models arrived, it had started regaining lost ground. Through September, its U.S. market share climbed five percentage points, to 11.5%, allowing Motorola to surpass rival Qualcomm Inc. and edge closer to industry leaders Nokia Corp., with 40% market share, and L.M. Ericsson, with 20% share, according to researcher Dataquest Inc. "They've gotten over the big hurdles," says Dataquest analyst Matt Hoffman.

"HUNGRY VENDOR." Investors agree. Motorola's stock has soared 40% since September, to around 60. On average, analysts expect the company to earn \$1.87 a share in 1999, up from 54¢ a share estimated for 1998. Rather than considering the stock a "sore point," said Susan F. Flischel, a Countrywide Investments portfolio manager, "we're cheering."

Why the changes? In July, Motorola rejiggered its communications division, consolidating autonomous divisions such as cell phones and two-way pagers under one umbrella and adding about 500 engineers to the effort. "We were more disjointed before," Caile admits. Today, "we're a much more organized and cohesive organization."

The moves have helped Motorola patch up relations with cellular service operators. For years, they considered the company difficult to deal with. Since reorganizing, "Motorola is acting like a hungry vendor who needs our business, vs. an arrogant vendor entitled to our business," says Don Warkentin, chief executive of Aerial Communications Inc. "That's a breakthrough."

The hole that remains in Motorola's comeback yarn? A tri-mode phone. Giant operators such as AT&T Wireless buy tri-mode phones almost exclusively because they shift seamlessly between two digital frequencies and analog mode so users can get their calls more easily as they roam. "That's the missing element," notes Hoffman. "They're largely out of the AT&T account." Motorola says it can fill the void by mid-1999.

As to completing its turnaround, part of the answer is up to fate—how the world economy performs. In the meantime, says Caile: "The important thing is to set targets...and keep those commitments."

By Roger O. Crockett in Chicago

COMMENTARY

By Aaron Bernstein

NBA MATH: A BILLION AND A HALF SAYS THEY'LL SETTLE

On Dec. 8, when National Basketball Assn. Commissioner David J. Stern canceled the mid-February All-Star Game, it seemed to be one more sign that the standoff between owners and players would kill the whole season. Stern issued dire warnings that a new labor pact must be reached within a week or two to salvage it. But with bargaining at a stalemate, no resolution to the five-month lock-out seems in sight.

Don't worry, the odds still favor a pro basketball season. Sure, both

promises necessary to end the lockout. Players took home about \$1 billion last season, or 57.5% of the league's \$1.7 billion in revenue. That was much higher than the 51.8% level that had been anticipated when the last labor contract was signed in 1995. In late October, players agreed to slow the increases by putting a chunk of salaries into escrow. Owners would get a refund of salaries go over an agreed-upon cap.

The key sticking point: Owners want a 50% cap; players say they won't go lower than 60%. The difference equals some \$200 million if NBA revenues hit \$1 billion this season. Still, a midpoint compromise would leave both sides better off than if the season were canceled.

Take the players. If the union, for example, got the NBA to accept last season's 57.5% salary cap, players might forgo up to \$50 million a year—nothing like the \$1 billion in salaries



sides may miscalculate and blow it by not compromising enough. But if you strip away the rhetoric, it's clear that both parties' economic interests are best served by a last-minute deal. The fact is, players and owners alike know they can't win enough at the bargaining table to make up for a lost season. "We'd be tragically hurt if the season is lost," says NBA Chief Legal Officer Jeffrey A. Mishkin, who still insists the NBA Players Assn. must give in.

NOT BLINKING. What's going on now is the classic game of brinkmanship that occurs in most labor talks. Stern is trying to scare players into swallowing the owners' central demand—a lower cap on league-wide salaries. So far, players haven't blinked. They think a viable season could be mounted even if a deal is struck in mid-January. Privately, NBA insiders concede that Stern may go as late as Jan. 10 before pulling the plug.

In the end, both sides would be crazy not to make the painful com-

promises necessary to end the lockout. They might lose less than players if the season never starts, since the costs are much lower if games aren't played. Still, they'd lose hundreds of millions of dollars, concedes Mishkin, especially since owners must repay the \$465 million in television money they are receiving during the lockout. That repayment could come from lower payouts over the life of the contract or from made-up games. If they compromise with a 57.5% cap, owners would only be out \$150 million—this year at least.

Admittedly, the fight is not just about this year. But a lost season could turn off fans for years to come. If that happened, owners and players might lose more than they ever could gain back. Which is why the game may soon move from the bargaining table to the basketball court.

Bernstein covers labor for BUSINESS WEEK from Washington

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What can we .com for you?



EDITED BY KELLEY HOLLAND

BILL'S NEW SOCIAL SECURITY STANCE

TAKING A STAND: FOR THE first time since he called for Social Security reform, President Clinton has signaled he would favor some form of investment in stocks and bonds as part of any fix. Following a private meeting with a bipartisan group of lawmakers at the close of a Dec. 8-9 White House conference on Social Security, a top Administration official said: "There was substantial agreement on the need to bring higher returns into the Social Security system." How would the Administration accomplish that? Clinton has not decided whether to support private investment accounts or a more modest plan that would

allow for Social Security assets to be collectively invested in securities, the official says. The White House could unveil a plan by late January.

WASTE SHOVELS IT TO SHAREHOLDERS

THE COST OF CLEANING UP Waste Management's books is rising again. After taking write-offs and restating earnings to the tune of \$2.9 billion, Waste and its auditors, Arthur Andersen, have agreed to settle shareholder class actions for \$220 million, one of the largest such deals ever. Waste plans to take a \$70 million aftertax charge—if the deal sticks. Plaintiffs' lawyer Sherrie Savett wants to make sure no "out-and-out fraud" was committed. The company is still cooperating with the Securities & Exchange Commission as it probes possible wrongdoing by former Waste execs.

CLOSING BELL

INN TROUBLE

Maybe it's time to change that ticker symbol. Starwood Hotels & Resorts Trust, which trades under the symbol HOT, fell 10.6% on Dec. 8—55% off its 1997 high. Starwood has warned that problems in its gaming business will bruise earnings in the fourth quarter and 1999. The latest trouble: delays in the opening of an Indiana riverboat casino and the sale of Las Vegas' Desert Inn. They're part of a series of setbacks: This summer, Congress legislated away Starwood's unusual tax-advantaged status.

STARWOOD HOTELS & RESORTS STOCK PRICE



BAD POLICY AT ALLSTATE?

ARE YOU IN GOOD HANDS WITH Allstate? Pennsylvania's Attorney General doesn't think so. On Dec. 8, the state sued Allstate Insurance, contending it illegally tried to dissuade consumers from seeking a lawyer's advice in claims against Allstate policyholders. The suit claims Allstate mails materials to residents, including a document called "Do I Need An Attorney?" that, the state alleges, suggests they will fare better without one. The suit also says Allstate used deceptive tactics to persuade consumers to give it access to medical and job records. The suit seeks \$1,000 for each violation of state law and \$3,000 for each violation involving someone 60 or older. Allstate denies the charges and says it believes its communications are protected under the First Amendment.

HEADLINER: STEPHEN RIGGIO

BARNES & NOBLE'S BROTHER ACT

Len Riggio has become famous for making Barnes & Noble the biggest name in book retailing. But the chairman's younger brother, Stephen, is putting together the deals to defend B&N against the online onslaught led by Amazon.com. On Dec. 7, the Barnes & Noble vice-chairman engineered a deal with Microsoft for Barnes & Noble to become the exclusive bookseller on its Microsoft Network.

Riggio, 44, says he has been negotiating with Microsoft since barnesandnoble.com was launched in 1997. The MSN site attracts 25 million visitors each

month—"a ton of traffic," he says.

Riggio's other online deals include selling a half-interest in

barnesandnoble.com for \$200 million to Bertelsmann in October. Next up: plan to sell 20% of barnesandnoble.com to the public. And B&N has

hired AOL executive Jonathan Bulkeley to run the site, with Riggio overseeing E-commerce strategy and acquisitions. Do the move daunt Amazon.com, almost 10 times barnesandnoble.com's size? A spokesman says there's room for all in cyberspace.

By Larry Ly



WAL-MART'S MARCH ON GERMANY

ONE YEAR AFTER ITS FIRST acquisition in Germany, Wal-Mart Stores made a deal on Dec. 9 to buy 74 Interspar hypermarkets with annual sales of about \$1.7 billion. In December, 1997, it made its first European foray when it bought the 21-store Wertkauf chain. Wal-Mart will soon use its own name on the German stores, which will serve as a springboard for further expansion in Europe. For the first nine months of this fiscal year, sales outside the U.S. accounted for \$8.5 billion of Wal-Mart's \$96.8 billion in revenues.

A TALL ORDER FROM TWA

WHAT WERE THEY THINKING? TWA announced the biggest jet order in its history—at least 125 jets over 10 years and

125 more for delivery on. What the carrier says is it doesn't really need all those planes. TWA is to be assembling a podge fleet: 50 Boeing 700s; 50 Airbus A318s, all cousin to the 717; and 20 Airbus A320s. TWA executives are helping to manage competition between Boeing and Airbus. Another point: If Boeing can't deliver the 717—formerly the Donnell Douglas MD95—TWA will have a backup in the

ET CETERA...

- 3Com and Siemens joining forces in a \$10 billion telecom joint venture
- J.P. Morgan says fourth quarter earnings fell so what analysts expected
- A&P will close or slash stores and take a charge up to \$160 million.
- Time Warner's cable systems will carry CBS digital signals.



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ED BY OWEN ULLMANN

WHY CLINTON COULD STILL EDGE IMPEACHMENT

There may be no such thing as a free lunch. But in Washington, there is a long tradition of the free vote. And that, more than anything else, explains why the same Bill Clinton who cheered the GOP's Nov. 3 comeuppance at the polls is now hanging by his fingernails in a bid to stave off impeachment by the House of Representatives.

House members often vote for controversial measures because they know that a more temperate Senate will let them off the hook. That dynamic is at work in the Republican drive to punish Clinton for the Monica Lewinsky scandal. With the House Judiciary Committee poised to urge impeachment, Majority Whip Tom DeLay (R-Texas) is telling some GOP centrists that a vote to impeach is a freebie because the Senate is unlikely to muster enough votes needed to remove Clinton, declares GOP pollster Neil R. McMillen, "is a free vote."

Clinton is wooing two dozen fence-sitting moderates by arguing that an impeachment vote is a symbolic gesture, not a punishment. The wavering pols are voting to spare Clinton from retaliation from the right wing. DeLay's sales job has been made easier by anger over the President's evasive answers to the 81 questions submitted by the Judiciary Committee. If DeLay prevails, Clinton will join Andrew Johnson, the only president impeached but not convicted.

IT HISTORY. But enticing as this zipless impeachment may be, it will not be cost-free. A Dec. 4-6 CNN/USA Today poll found that 66% of Americans want their representative to oppose impeachment. White House strategists know that any Republican from a competitive district who votes for impeachment will face a backlash from subcommittee members.

Republicans risk "flying in the face of public opinion," frets

GOP pollster Tony Fabrizio. "We're talking about things that nobody cares about, while [Democrats] are talking about things that are important to the country." Democratic lobbyist Werner W. Brandt adds that Republicans "risk being stuck with this, just as they were stuck with being the party that shut down the government" in 1995-96. Even outgoing Republican Senator Alfonse M. D'Amato of New York, who knows something about the dangers of attacking the Clintons, warned on Dec. 8 that impeachment would only harm the

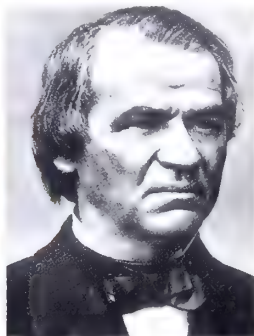
American people. "A lot of members feel trapped," says GOP lobbyist Mark W. Isakowitz. "Republicans don't want to be defined by this." But some Democrats think worries about the next election are a stretch. "By November 2000, whatever is happening now is going to be ancient history," says Democratic consultant Brian Lunde.

ESCAPE PLAN. Still, any hopes for bipartisan deals on Social Security, trade, and health care could vanish if the House tosses the impeachment hot potato to the Senate for a trial. "That will be the end of Social Security reform," warns Senator Tom Harkin (D-Iowa).

Many GOP centrists are still hoping that Clinton, master of the 11th-hour maneuver, gives them a way out. For days, the White House has been dangling hints of a deal, floating ideas such as a stiff fine and another personal expression of contrition by the President. Republicans want more: an outright admission of perjury. But Clinton has been unwilling to make any gesture that opens him up to the threat of future criminal prosecution.

If nobody blinks, Bill Clinton could see his legacy forever tarnished. And Republicans could discover that "free" votes sometimes carry a steep cost.

By Amy Borrus, Richard S. Dunham, and Lee Waleczak



TWO-MEMBER CLUB? Johnson wasn't convicted

CAPITAL WRAPUP

THE CIA A DOUBLE AGENT?

It sounds like a juicy scandal. The Defense Dept. is investigating whether a top aide tipped off Hughes Electronics executives that the Senate Intelligence Committee wanted them to provide about suspected technology transfers to China. But the spy agency's innocent explanation: It was being helpful by giving the committee the names of appropriate executives to question—and then telling them to expect to hear from the committee. What's more, Hughes already

knew about the issue that piqued the committee's interest: three-year-old gripes by a CIA analyst that Hughes improperly provided China with high-tech gear and knowhow.

A congressional aide who downplays the flap fears that the probe, launched at the committee's request, will divert attention from a separate, more serious, probe into whether Hughes gave technical help that improved Chinese rocket launchers. "Any examination of Hughes's practices in China will show a pattern of malfeasance," the aide says. Hughes denies any wrongdoing.

BANKING REFORM BROUHAHA

► The House and Senate banking committees may be on a collision course. House Committee Chairman James A. Leach (R-Iowa) says he'll reintroduce the complicated overhaul drafted in the last Congress early next year in hopes of quick action. But incoming Senate panel Chairman Phil Gramm (R-Tex.), who sank the '98 bill because of its community reinvestment rules, prefers to start over with a simpler bill that just lowers barriers between financial services.

MEXICO

MEXICAN MAKEOVER

NAFTA creates
the world's newest
industrial power



Starting for clients on the Internet, a Mexican entrepreneur in Monterrey has turned a small metal-working company into a \$10 million-a-year exporter to General Electric Co. and Siemens in just five years. In Guadalajara, a 26-year-old high school graduate earns more than \$500 a month inspecting silicon components that will help power IBM computers around the world. Across the country, in the city of Puebla, 15,000 Mexican workers churn out Volkswagen's new Beetle for export to the world, including Germany.

Mexico's economy is undergoing a stunning transformation. Five years after the launch of the North American

Free Trade Agreement (NAFTA), it is fast becoming an industrial power. Free trade with the U.S. and Canada is turning the country from a mere assembler of cheap, low-quality goods into a reliable exporter of sophisticated products, from auto brake systems to laptop computers. Since 1993, exports have more than doubled, to \$115 billion. Manufactured goods now make up close to 90% of Mexico's sales abroad, up from 77% five years ago.

Oil, by contrast, makes up 7% of Mexico's exports, down from 22% in 1993. Mexico's manufacturing sector pulled the economy along at 4.5% growth this year—even though the gov-

ernment still depends on oil for 50% of its budget revenues. President Ernesto Zedillo has been forced to slash spending and raise taxes to make up for the shortfall. That squeeze could slow growth to 2.5% next year, economists say, and helps explain why Mexico's economy is down 40% this year in real terms. Still, NAFTA has helped pull Mexico from both the plunging oil prices and the fallout from the emerging-markets crisis. "This is a completely different economy than it was a decade ago," says sociologist Gerardo Reyes Heróles.

Mexico's industrial surge also means that North America is winning

Asia's loss is North America's gain as U.S. and Canada

ands of jobs that had been lost to as U.S. and Canadian companies d production to lower-cost produc- sites in the last decade. Now, for ple, IBM is making computer com- its in Guadalajara that were for- made in Singapore. And clothing ers such as Gap Inc. and Liz Clai- are increasingly buying garments Mexican contractors, who can offer delivery than Asians.

shift back from Asia is just part oom in foreign investment in Mex- as companies from Samsung to er Benz to DuPont open factories pand existing operations, foreign investment has soared from \$4 in 1993 to an average \$10 bil- er year. Moreover, the foreign are no longer mainly *maquilado*- assembly plants huddled along the Mexico border. Now, many are sophisticated factories scattered hout the country.

foreigners are attracted by Mex- ow-cost labor—averaging \$1.60 an n manufacturing, compared with n Taiwan and less 0¢ in China—and ty-free access to .S. market. Just portant, however, guarantees fors the same rights exican investors assures them that o will continue on e-market course. i we invest, we er political sta-' says Young M. president of Sam- Electromechanics ana.

the makeover of an industry goes yond export and ment numbers. small entrepre- to executives of ntry's new multi- als, Mexican man- are becoming onfident as they d to heightened ition at home and tough demands eign customers. "has given Mexi- new vision of the ' says Clemente urán, an econo- the National Aus- us University of

THE WONDERS OF FREE TRADE

MANUFACTURING Mexico is becoming an industrial dynamo with manufac- tured and other goods accounting for 90% of exports, spurring new jobs

INVESTMENT Access to the North American market entices Asian and European companies to pour billions into auto parts, electronics, and textiles

GLOBAL MINDSET An increasingly confident business community has aban- doned its fear of foreigners and is structuring operations for world markets

DATA: BUSINESS WEEK

To be sure, Mexico still faces huge problems. Indeed, it seems there are really two economies, with free trade benefiting only one. Despite a sharp increase in manufacturing employment, Mexico still suffers from a chronic shortage of jobs, with millions subsisting on part-time work in the "informal" economy. Mexico needs to generate 1 million new jobs each year just to absorb young people entering the job market. To achieve that will require even more investment and better training.

Nevertheless, Mexico is laying a solid foundation for economic growth and employment in the years ahead. Increasingly, Mexican engineers are designing products and testing them in multi-million-dollar research and development centers. NAFTA has also given a boost to more traditional industries. Agribusinesses are exporting frozen products to markets as far away as Sweden. And Mexican service businesses are processing U.S. credit-card data and airline tickets as well as creating custom-made software for U.S. clients that once farmed out such work to India.

But the auto industry stands out as Mexico's single most important manufacturing business. It has become integrated with the U.S. industry as parts and vehicles shuttle back and forth across the border. Half a million Mexicans make parts and assemble vehicles for eight of the world's auto makers, including Detroit's Big Three. NAFTA's rules of origin, requiring high

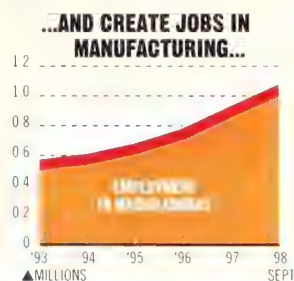
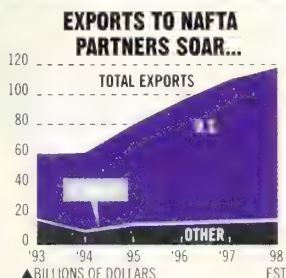
North American-made content in cars, have forced European and Asian auto makers to bring their foreign parts suppliers to Mexico as well as buy from local companies. In Puebla, 70 parts makers cluster around Volkswagen's sprawling plant, which produces 600 Beetles and 900 other vw cars per day. **BEEBLE POWER.** One supplier is Refa Mexicana, a metal-stamping plant started by Canada-based entrepreneur Klaus Reithofer four years ago with a \$4 million investment. Today, he employs 1,300 people working three shifts and generating \$57 million in annual sales. "We were only supposed to be 130 people, but vw has thrown so much stuff at us, and we took it," Reithofer says. "It's miraculous."

Similar explosive growth is happening in Guadalajara, the country's second-largest city. A joint government-business effort has lured 25 foreign suppliers to set up there since 1995. Taiwan's Universal Scientific Industrial Co. (USI) this year began producing 2,900 computer motherboards daily for IBM in a new plant employing 270 people. Before, the boards were shipped in from Taiwan.

At the IBM complex nearby, workers produce magnetic readers for computer hard-disk drives. The parts used to be made in Singapore, Taiwan, and Malaysia. Now, IBM ships them from Guadalajara by air each day to San Jose, Calif., where hard drives are assembled for IBM's laptops, desktops, and servers worldwide. Plant Manager Alfonso Alva Rosano says NAFTA helped persuade IBM to shift some operations from Asia to IBM de México, which in five years has boosted exports from \$350 million to \$2 billion. "If we weren't making the subassemblies here," Alva Rosano says, "chances are the whole process would have moved to the Far East."

Mexico's textile industry is also bringing factories and jobs back from Asia. NAFTA rescued Mexico's declining textile makers by eliminating U.S. tariffs and quotas on fabric and garments made with yarn produced anywhere in

THE BIG PAYOFF



DATA: BANK OF MEXICO, CREDIT SUISSE FIRST BOSTON SANTANDER INVESTMENT, BUSINESS WEEK ESTIMATES

Multinationals shift production work to Mexico

the three member countries. In 1996, Mexico overtook China as the largest supplier of textiles and garments to the U.S. Now, U.S. mills are rushing to invest. In Altamira on the Gulf of Mexico, for example, Guilford Mills Inc., based in Greensboro, N.C., is building a \$100 million knitting, dyeing, and finishing plant. In Puebla, several Mexican families set up a venture, Skytex, that is turning out two million yards of polyester fabric per month. Half of it goes to the U.S. "This plant was conceived for NAFTA," says Deputy Sales Director Alberto Sotol. "I can ship to the border in 18 hours, while the Asians take 21 days."

As the border becomes more porous, many top Mexican executives say they now consider their companies to be North American corporations. Take Monterrey-based Grupo IMSA, a \$1.5 billion maker of steel, auto parts, and construction products. In the U.S., it makes insulated panels and ladders, and it has merged businesses with Johnson Controls to manufacture and sell batteries in Mexico and South America. "For us, NAFTA is a single market—we feel we're an American company," says General Director Eugenio Clariond Reyes.

EDUCATION GAP. In Mexico, though, free trade is exposing more starkly than ever some of the failures of Mexican society, particularly in education. Many analysts believed NAFTA would generate years of demand for Mexico's masses of unskilled, poorly educated workers, who average only 5½ years of schooling. Instead, many employers are leapfrogging to high-tech operations that require a high school education even for assembly-line operators. Since 1993, the gap has widened between wages at local manufacturers and those at top export manufacturers, which are up to 67% higher.

Still, Mexico has achieved a lot in five years. The country's new efficiencies and export mentality should help diversify its trade beyond NAFTA to new markets in Latin America and the rest of the world. "Businesspeople are looking outside the country and into the future," says political scientist Luis Rubio of the Center of Research for Development, a think tank in Mexico City. For companies that have succeeded in Mexico's open market, "it's no longer, 'Those darn gringos.'" Rubio says, "but 'How can we beat them at their own game?'" In a dog-eat-dog global economy, that kind of attitude should serve Mexicans well.

By Geri Smith in Guadalajara, with Elisabeth Malkin in Puebla

TAIWAN

MAKING BEIJING'S HEADACHE WORSE

The KMT victory won't cool independence sentiment

Taiwan's ruling party, the Kuomintang, came roaring back in Dec. 5 legislative and mayoral elections. A year ago, the KMT seemed to be on its last legs when it lost out in local elections all over the island. This time around, though, it lavished cash on its candidates, spending over \$250 million—more than all its opponents together. And it enforced party discipline to focus votes on fewer



candidates and widen its majority in the enlarged 225-seat Yuan legislature to 10 from just 2.

The KMT's biggest coup, however, was to snatch the mayoralty of Taipei back from the Democratic Progressive Party. The brash, pro-independence incumbent, Chen Shui-bian, lost despite approval ratings of 70% as national issues predominated. In ousting Chen by a 51% to 46% margin, the KMT's Ma Ying-jeou, a former Justice Minister, dented Chen's plans to run for the presidency in 2000.

At first blush, Ma's victory seems to be a setback for Taiwan's burgeoning independence movement, which causes friction with Beijing. But that appearance is deceptive. Chen's defeat doesn't signal any real decline of independence sentiments in Taiwan. Although beaten in Taipei, Chen is still very popular in other areas. And without a job, he is now free to start campaigning for 2000, provided he can rally the DPP around his candidacy. Besides, President Lee Teng-hui's KMT is cool toward reunification.

Moreover, Ma was eased into office by an extraordinary maneuver of pro-China New Party, which favors unification. Two days before voting, it effectively told supporters to vote for the party, which had polled 9% a year before the elections, ended up with 3%. "There was a wholesale shift of porters from the New Party to the KMT," says Chu Yun-han, a political scientist at National Taiwan University.

BIG CHALLENGES. President Lee, one of Beijing's bugaboos, also was a big challenge. Lee is not close to Ma and had seemed lukewarm toward his candidacy but in the closing days of the campaign offered him strong public backing. His family is from Taiwan, unlike Ma's, who was exiled from the mainland in 1949. His support bolstered Ma's claim to be "New Taiwanese" and gave Taipei's

middle-class Taiwanese a reason to vote for the KMT.

The KMT's success shows voters favor stability over ideology, which pleases Beijing. But KMT leaders face big challenges, as a looming fratricide rift inside the party. Mainlander Jin Soong, who will step down soon as Taiwan's provincial governor, is certain to challenge President Lien Chen, a Taiwanese and Liberalist, for the presidential nomination.

With so much local turmoil in Taiwan, Beijing needs to understand whatever joy it feels at Chen's defeat. And the New Party's islandwide success shows how few takers there are for its ideas. "It would be unwise for Beijing and Washington to throw away their aspirin. The headaches will continue," says Andrew Nathan, a Columbia University political scientist.

Worse yet from Beijing's standpoint, the vibrancy of the democracy taken root in the decade since it abandoned police-state rule. During the campaign, voters argued, candidates debated, and the media covered it all.

With each election, Taiwan takes another step away from China, without again clamping down on its own democracy dissidents. The huge turnout of voters in Taipei and elsewhere on the island shows Beijing still has to move to win the people of Taiwan.

By Jonathan Moore in Taipei



(kick off your shoes)

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JAPAN

TOYOTA'S MIDLIFE CRISIS

Can it appeal to young Japanese buyers?

Toyota Motor Corp.'s commander in chief, Hiroshi Okuda, is beaming. Hundreds of French citizens are gathered to celebrate his latest conquest: a sprawling site for a \$277 million factory near Valenciennes, in northeastern France. Okuda seals the deal by laying two stones for the plant, contributing \$177,000 to local causes, and planting several cherry trees—proof that Toyota wants to take root in Europe. Then he dons a short kimono and takes up a wooden mallet to open four barrels of hot sake as part of Japanese ritual. The spectacle leaves little doubt that Okuda is serious about extending Toyota's reach around the world.

But back at home, Toyota looks battered. Japan's No. 1 carmaker managed record pretax operating profits of \$3.4 billion, on sales of \$52 billion, for the first half of this year. Yet these figures obscure something important: Toyota is barely breaking even in its most critical market, Japan.

Some analysts believe the company has started to lose money in its domestic car business. Merrill Lynch & Co. reckons Toyota loses \$423 on every car it sells at home. Only the sale of spare parts and accessories pushes domestic operations into the black. Toyota slices the data differently: It lumps export profits together with domestic sales. But even executives admit conditions in the home market are dreadful. Toyota's vehi-

cle sales in Japan have tumbled 31% since 1990. Its market share has been below 40% since 1995, and the company must spend more than ever to lure customers into showrooms. Japan's economy, it seems, has become Toyota's Achilles' heel.

SHORT ON ZIP. To Toyota's North American rivals, none of this matters for now. All they see is the Toyota juggernaut in the U.S., which in November upped its share of the world's biggest market by more than a full percentage point, to 9.1%. Detroit executives are only dimly aware of Toyota's woes at home. They probably figure the giant will recover its momentum when the recession ends. "Toyota is a tough, tough competitor," says Ronald L. Zarrella, head of General Motors' North American division.

But the question still demands an answer: How long can any carmaker afford to give up profits in its core market? Japan accounts for just 38% of Toyota's worldwide car sales—down from 52% in 1990. Those sales generate little in the way of profit, while North America accounts for an estimated 80% of operating income, with Europe accounting for most of the rest. "Americans have been feeding us," concedes Kanji Kurioka, executive vice-president for domestic sales. Yet with the yen now strengthening against the dollar, every one-yen increase knocks some \$68 million off net profit. Says Fujio Cho, execu-



GENERAL SHAKEUP

As President Okuda extends Toyota's global reach with new models, he wants to cut costs and staff at home

tive vice-president for corporate planning: "I tell people, 'You can't rely ever on a weaker yen.'"

The recession has certainly taken bite out of Toyota's Japanese realty, but the company must accept much of the blame for its troubles. It has failed to cater to younger buyers' desire for zippy compact minivans and sporty vehicles. And shrinking sales mean that Toyota must pay for factory dealership workers it doesn't need.

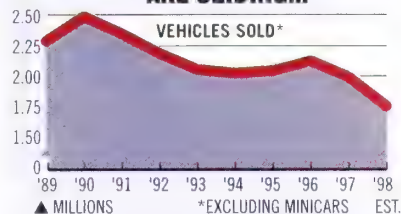
Toyota's woes typify the problems plaguing Japan Inc. Until the mid-1990s, Toyota could depend on results abroad to drive rapid expansion at home. But analysts believe Toyota earned as much as 90% of operating income from its domestic operations at its peak in 1990. The Japanese market was predicted to be with Toyota on top. It faced weak support by dealers who felt the need to discount, and sold to consumers who meekly accepted high prices.

Now, the pattern is reversed.

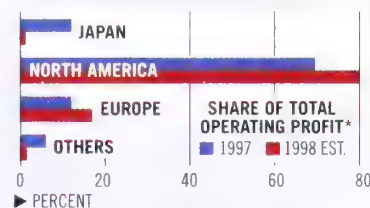


Toyota's Homegrown Woes

DOMESTIC SALES ARE SLIDING...

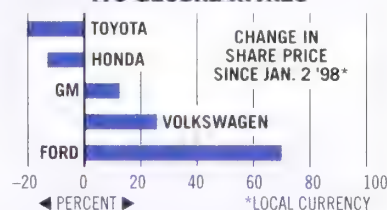


...PROFITS FROM JAPAN ARE SHRINKING...



*PROFITS FROM SALES TO JAPANESE CUSTOMERS: EXCLUDES SALES FROM EXPORTS

...AND THE STOCK LAGS ITS GLOBAL RIVALS



DATA: TOYOTA MOTOR CORP., MERRILL LYNCH & CO., BLOOMBERG FINANCIAL MARKETS

as profits are propping up Japan. s capacity, picky consumers, sur- workers, price wars, and hemor- ing affiliates have become the rule an. Honda Motor Co., which for played a small role in Japan, is at- g Toyota's domestic market with a ance. Already, Toyota must worry keeping its No.3 ranking among world's auto makers. DRI/McGraw- automotive analyst Philip Rosen- estimates that Toyota and Volks- will each sell 4.5 million vehicles ear.

these conditions persist, even Toy- \$25 billion cash hoard could dwin- s the giant wages a war of attri- t home. Eventually, a low-profit stic market could undermine its ambitions. "In a sense, we are ed," admits Okuda. "We set a tar- selling 6 million vehicles [a year] early 21st century. However, be- of the recession, it's necessary to l that target."

Some Toyota executives compare their problems to those GM faced more than a decade ago. "Sometimes, we face difficulties deciding which direction to go," says Chairman Shoichiro Toyoda. "I used to think that [GM Chairman] Roger Smith had [that] trouble." Toyota is much healthier than GM—but Toyota executives know how foreign profits dulled GM management's sense of crisis. GM's U.S. market share has shrunk from 40.3% in 1985 to 29.4% this year.

SACRED GROUND. So Okuda has embarked on an aggressive restructuring. "Toyota has a sense of crisis. It is making efforts, but it takes time," says Takaki Nakanishi, an analyst at Merrill Lynch. Yet watching rivals such as Nissan Motor Co. and Mitsubishi Corp. approach the brink has convinced Okuda that the longer he waits, the more painful the process will be.

The workforce is one place to start restructuring. Next year, Toyota will hire 9% fewer high school and universi-

ty graduates. Some of these new hires will be contract employees with no expectation of lifetime employment. If all goes as scheduled, such hires will make up one-third of the payroll by early in the next century. "We will be gradually reducing our workforce," says Okuda.

Toyota also expects to shed \$678 million in costs this year, largely by designing cars with fewer, simpler parts and sharing more parts between models. To shave an estimated 30% off development costs, Toyota is using the chassis from its European-designed Yaris for a new subcompact in Japan and for at least two other models. Such efforts should lessen the blow of smaller sales volumes during Japan's deepening recession. Toyota's engineers used to develop cars on the assumption that the company would sell 10,000 units per month. Now, many must design cars to make profits at lower prices and monthly volumes as low as 2,500.

Beyond that, Okuda is shaking up

the chain of command to regain its market share among Japan's younger buyers. After he became president in 1995, Okuda ordered a task force of Toyota's thirtysomething managers to make up a youth division and to think big—fast. “He said that if we couldn’t think of anything in three months, then we probably wouldn’t be able to come up with an idea,” recalls Hideaki Homma, 35. The result was a new company to design and sell cars for young people. Dubbed the Virtual Venture Co. (VVC), its managers answer only to Okuda and work in the hip Tokyo district of Sengenyama, well-removed from Toyota’s stodgy headquarters.

VVC is scheduled to develop at least one cool car by 2000. But the longer VVC takes, the more opportunities Toyota will miss to lure those crucial younger buyers. “Toyota is for old people, not for us,” says Ken Nomura, 29, who cruises around Tokyo with his girlfriend in a Honda \$19,200 CR-V sport-utility vehicle.

In the meantime, the VVC subsidiary is experimenting with unconventional sales strategies. For a small fee, it is allowing the public to test-drive most of the cars in Toyota’s lineup in a Kobe parking lot. It’s building an \$83 million amusement park on the edge of Tokyo that will open in April, complete with everything from futuristic vehicles to an area where people can design their own cars. VVC estimates these efforts have boosted sales of some Toyota models by 10%.

A FEW FLOPS. Good stuff, but Toyota continues to struggle to regain its 40% market share. Many of Toyota’s attempts to create entirely new markets aren’t working. The Altezza and Progres luxury cars are hits. But the \$18,600 Vista next-generation sedan and the \$16,000 Nadia “monospace” sedan, which looks like a cross between a station wagon and a minivan, continue to fall far short of sales targets.

Even Toyota’s revolutionary hybrid, the Prius—which runs both on gasoline and an electric battery to cut the emissions dramatically—may be an example of a superb technology with no real market. The \$16,500 Prius is being sold at a price that analysts estimate is only about half what it costs to build the car. Toyota makes 2,000 Prius cars a month, yet consumers have lately been buying less than 1,600 every month. “The Prius is being sold near [other Toyotas] that are discounted. And only cheap cars are selling now,” says a disappointed Akihiro Wada, executive vice-president for research and development.

To plump up sales of the Prius and other models, Toyota is overhauling its 5,600 dealership outlets. It has stopped supplying dealers with look-alike models, to eliminate unnecessary price competition, and starting next year, if dealers cannot meet sales targets, they run the risk of losing their franchise. Sixty-six dealers have established 1,074 “Netz” outlets intended to attract women and youth with showrooms that are brighter and swankier than most Toyota outlets. On its own, Toyota has begun constructing a massive “auto mall” in the Japanese Alps that will sell every model in Toyota’s lineup—in addition to prefabricated houses.

Okuda figures that quite a lot remains to be done, even while shying off the naysayers. “Analysts saying all sorts of things about our company,” he says. “They don’t know anything about the future, and they don’t know the details of our operation don’t care that much about what they’re saying.” Nevertheless, he admits Toyota must go ahead at full speed. Says Okuda: “Recession is a time to overcome the enemy.” And, he hopes, the time to fix what ails Japan’s premier company.

By Emily Thornton in Tokyo, Kathleen Kerwin in Detroit and Paul Resch in Valenciennes

LEXUS: ALL REVVED UP WITH SOMEPLACE TO GO



In the U.S. market, Toyota Motor Corp.’s most dazzling performer these days is its Lexus division. It was not always so. After a

spectacular debut that caught its European rivals asleep off guard, a skyrocketing yen forced Lexus to raise prices. The flagship LS 400, introduced in 1989 at \$35,000, was going for more than \$50,000 by 1994. Meanwhile, BMW and Mercedes-Benz redesigned their products and cut prices. Lexus sales went into a stall. **SWITCHEROO.** Now, Lexus is back in gear. Its products, once criticized as bland, have new spark, with stronger engines and more feel-of-the-road for the driver. The new GS sedans, launched a year ago, are more aggressively styled. And its \$32,000 RX 300

A CONVERT TO THE RX 300

Says Giles, 41:

“I wanted to break away from the pack”

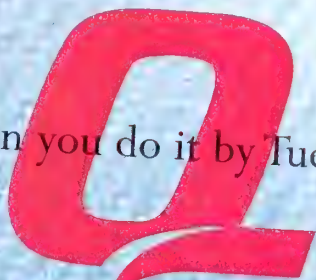
sport-utility vehicle has been the division’s best seller since its April launch. With sales up 57% this year and on track to surpass 150,000

vehicles, Lexus has zoomed past BMW.

While Toyota may be struggling to attract younger Japanese, Lexus’ new GS and RX models are luring new—and younger—buyers. Peter Giles, 41, switched from a Jeep to the RX 300 in September. “It seems like everyone and his brother has a Jeep. I wanted to break away from the pack,” says Giles, who owns a publicity agency. Like Giles, some 65% of RX 300 buyers haven’t owned a Lexus before. So for Lexus, the joyride may just be starting.

By Larry Armstrong in Los Angeles

And can you do it by Tuesday?



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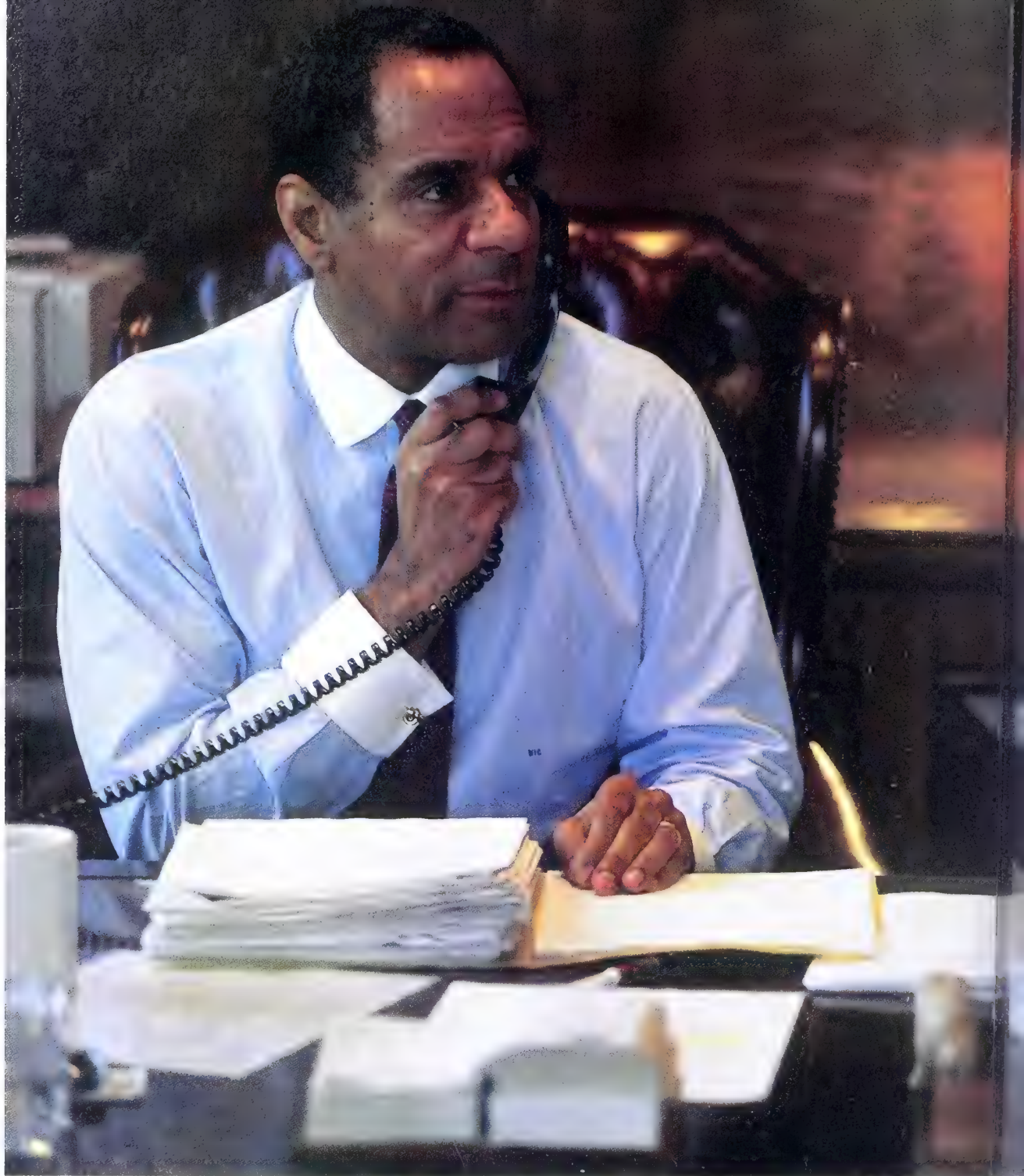
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THE RISE

Ken Chenault helped bring AmEx back from the brink. Now, he may be on the brink of even bigger things



At Bowdoin College in the early 1970s, Ken Chenault spent endless hours at the Afro-American Center debating the great issues of the era with his classmates. That his peers often chose Chenault to represent

them in negotiations with school administrators had everything to do with his character and abilities and little to do with his views. Unlike most other "Afro-Am" activists, Chenault argued that the cause was best served in the long run by rising to power within the Establishment instead of assailing it from without. "We all thought he'd rise to high position on the inside," says George Khaldun, Chenault's roommate. "The joke was that when we all had to go to jail for our radicalism, at least we knew Ken would be there to bail us out."

As it happened, no one needed bailing out, but Kenneth Irvine Chenault has met his classmates' lofty expectations and then some. Today, he is president and chief operating officer of American Express Co., a \$19 billion pillar of corporate respectability and possessor of one of the world's premier consumer brands. Chenault, 47, has held American Express' second-highest executive post since February, 1997, and also sits on its board of directors. Early this year, his authority was enlarged to include the only two operating divisions not already reporting to him. He moved even higher into the corporate stratosphere on Oct. 27, when IBM elected him to its board.

Cover Story

An elegant, quietly charismatic man of even temper and unrelenting drive, Chenault tends to inspire his admirers to extravagant praise. "Ken radiates such a depth of belief that people would do anything for him," says Rochelle Lazarus, chairman and CEO of Ogilvy & Mather Worldwide Inc., AmEx' lead advertising agency. "He is a true leader." Adds Amy DiGeso, a former AmEx executive who is chief executive of Mary Kay Inc.: "I can say unequivocally that I admire Ken more than anyone else I've ever worked with. I think he will be our generation's Jack Welch."

Still an up-and-comer in the corporate world, Chenault is an established star in what his friend Richard D. Parsons, president of Time Warner Inc., calls "the circle of African American professionals who have achieved." Denzel Washington was dining in a Manhattan restaurant recently when he

OF A STAR

A DAY IN THE LIFE OF KEN CHENAULT

From the corner office to the lunchroom at American Express headquarters in Manhattan



9:15 AM *Chenault and CEO Golub prep for a joint presentation later that day*

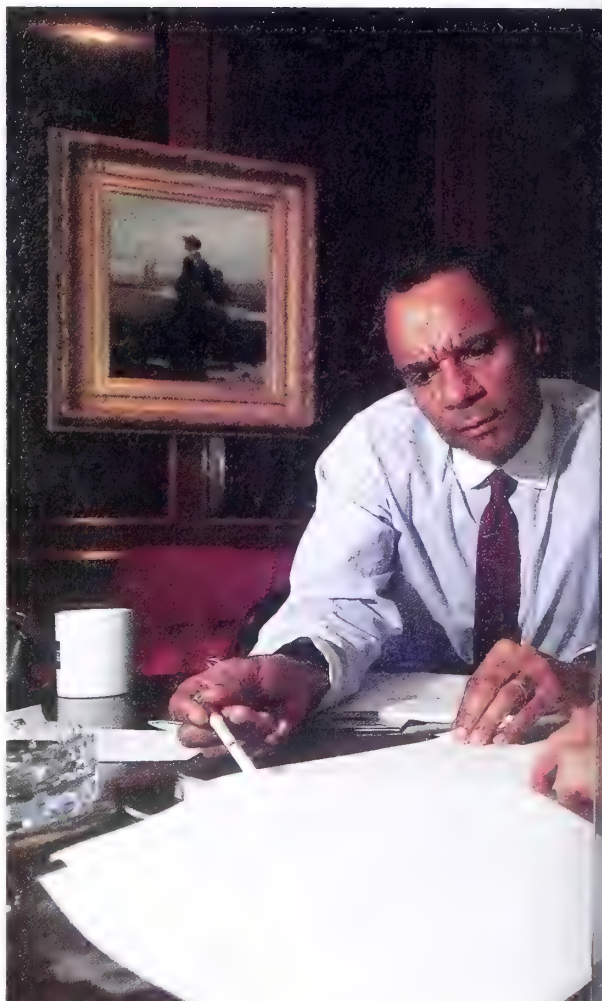
spied Chenault across the room. The actor asked the proprietor to introduce him and followed her to Chenault's table. "My mouth was hanging open, but it seemed like Denzel knew all about Ken," recalls Geoffrey Canada, a longtime friend (and Bowdoin classmate), who was sitting with Chenault. Says basketball legend Julius Erving, who has known Chenault since boyhood: "He is a man of destiny—and a really good person besides."

Chenault worked his way up through the huge card and travel unit known as Travel Related Services Co., which generates two-thirds of AmEx' revenues and most of its profit, too. He was instrumental in not only reviving but reinventing TRS, which nearly collapsed in the early 1990s under the weight of its own hidebound complacency. "It would be hyperbole to say that we were in danger of going out of business, but I did fear that we were running out of time to turn things around," says Chenault. AmEx' stock, which scraped bottom at 17 in 1991, hit a high of 118 earlier this year and now trades at about 100.

Harvey Golub, whose 1993 appointment as AmEx chairman and chief executive was the key event in the company's comeback, has rewarded Chenault with a series of promotions and pay hikes. In elevating him to president and the newly created position of chief operating officer in February, 1997, Golub dubbed Chenault "the primary internal candidate to succeed me when the time comes." Golub, 58 at the time, hastened to add that he was not planning to retire early. He still isn't. For his part, Chenault declines to speculate on his prospects of making CEO at AmEx, or anywhere else, insisting that he is wholly focused on the job at hand—and a demanding job it is.

ROOM FOR IMPROVEMENT. AmEx has three overriding financial goals: to boost earnings per share by 12% to 15% annually, to maintain a return on equity of 20%, and to increase revenues by at least 8% a year. The first two objectives have been met handily, but the team of Golub and Chenault has proven far more adept at creating cost efficiencies than at spurring revenue growth. For the first three quarters of 1998, AmEx posted a revenue gain of 7.5%, pulling its three-year average up to 6.4%. "The company has come a long way, but our performance has been mixed," Chenault concedes. "We need to improve it dramatically."

Golub's predecessor, James D. Robinson III, spent the



1980s diversifying AmEx through a series of bold but disruptive acquisitions of other financial-services firms. With big assist from Chenault, Golub took AmEx back to its roots, jettisoning many of the acquired assets and thoroughly restructuring those that remained. But now that AmEx has been restored to solid profitability, Golub and Chenault face the same question that sent Robinson on his shopping spree: Can AmEx develop the heft and global reach it needs to remain self-sufficient, or will it have to seek a merger partner?

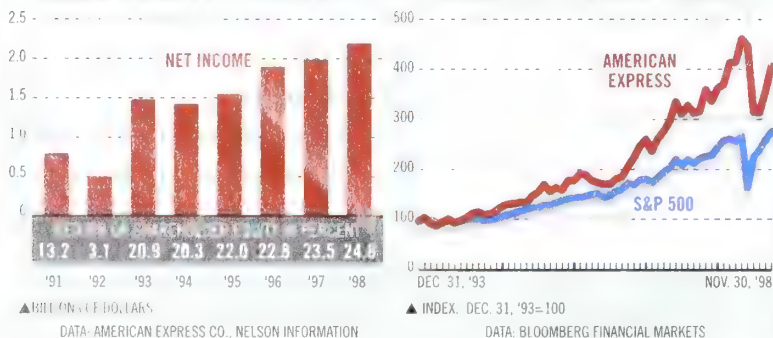
Golub says he promoted Chenault to president because he found this challenge too daunting to tackle alone. "I do not get done all the things I needed to do," he says. "I needed help." He says he took the added step of identifying Chenault as his successor to buttress the new president's authority. In fact, it was his hope that Chenault would be

less as his subordinate and more as a collaborator and alter ego: "What I sought was a horizontal relationship with Ken that would enable me to do more and more of what I was doing."

Golub's hope has been realized. Both Chenault and Golub say they have built an unusually symbiotic partnership. "If Ken and I went separately to 10 different meetings at which a decision was needed, my guess is that 9 times out of 10 I would make the same decision, and the 10th would involve just a nuance of difference," Golub says.

The effectiveness of the Golub-Chenault partnership is surprising only in that AmEx' CEO has not been considered an easy man to work with. He is a cerebral sort who spent nearly 15 years at McKinsey & Co. consultant before joining AmEx.

AMEX PROFITS TAKE OFF... ...AND ITS STOCK SOARS





takes a blunt, uncompromisingly analytical approach to business that tends to inspire respect and fear in roughly equal measure. He made his mark running AmEx' Minis-based money-management arm, acquired in 1984 and known as American Express Financial Advisors. His rise to chairman and CEO of the parent company was followed by a sizable exodus of senior executives, especially

former management consultant himself, Chenault is said to be as hard-driving and pragmatic as his boss. Unlike Golub, he has always been able to engage the emotions of his employees as well as their intellects. "Harvey is a brilliant man, but Ken has the hearts and minds of the people at the company," says Thomas O. Ryder, a longtime AmEx executive who recently became CEO of Reader's Digest Assn.

DOOR. An extensive survey of current and former colleagues suggests that the Chenault personality is mercifully free of the rough edges that usually accompany vaulting ambition. Not one could recall him losing his temper or even raising his voice. He makes time to chitchat with secretaries and to telephone his bosses and has taken it upon himself to mentor dozens upon dozens of promising young managers. A methodical, inclusive decision-maker, he leaves his door open to subordinates and encourages them to speak their minds. "With Ken, there's no game-playing, no politics whatsoever," says Norma Arnold, a 23-year AmEx vet who left Prudential Insurance Co. last year.

It must be said that Chenault has been conspicuous at AmEx not only for his accomplishments but also for the color of his skin. Like many large cor-

porations, AmEx has made a belated effort to make its workforce more racially diverse. Minorities now make up 17% of the company's managers—a figure that was much lower when Chenault began his rise through the ranks. While Chenault supports AmEx' remedial campaign, he is loath to be seen as its product, friends say. "Ken wants one day to be known as the best CEO, not the best African American CEO," says John Utendahl, founder and CEO of Utendahl Capital Partners, Wall Street's largest black-owned investment bank.

In fact, Chenault's career does not give off the slightest whiff of racial preference. He entered AmEx with sterling credentials and, by all accounts, rose on the strength of talent and hard work. The real issue is the opposite one: To what extent was his rise made more arduous by race? This is a question given added meaning by AmEx' identity as an icon of upper-class affluence. In America, membership does indeed have its privileges, and they have never been evenly distributed between black and white.

The question of how race has factored into his corporate career is not one Chenault cares to address. But even some of his closest chums wonder to what extent his extraordinary self-composure is a product of bias-hardened stoicism. "There has to be struggle within Ken—he's only human—but I have never seen it," says Khaldun, who has maintained close contact with Chenault ever since college. "Even in our most vicious debates at school, he never lost it. It's just unreal. I don't know where he gets it."

Like father, like son. Ken revered his father, Dr. Hortenius Chenault, who died in 1990 at age 80. Not long after his father's death, Ken told *Newsday* that he was the most determined person he had ever known. "He overcame every possible type of obstacle," he said.

"USEFUL BALANCE." The son of a butler and a maidservant, Hortenius Chenault grew up in a small, mostly white town in Ohio and graduated from Morehouse College with honors. In 1939, he earned a degree in dentistry from Howard University and passed the New York state dental licensing exam with the highest score recorded to date. During World War II, Chenault enlisted in the Army, but segregation blocked his path into the multinational Allied Dental Corps. Undaunted, he befriended a group of foreign officers and entered the corps through an international arm.

Chenault married an African-American dental hygienist, Anne N. Quick, who hailed from an affluent background and accom-

PICK A CARD

Chenault directed the effort to expand AmEx' lineup of credit cards. Today, the company offers dozens of "co-branded" cards

Cover Story



plished South Carolina family that had founded a cargo-shipping business in the early 1900s. In 1947, Hortenius and Anne Chenault settled in Hempstead, N. Y., where they raised four children. Born in 1951, Ken was the second of three brothers and a sister.

Ken's boyhood coincided with the peak of civil rights activism on Long Island, and the movement was a frequent topic of conversation at the dinner table. "My father's basic view was that you really needed to concentrate on the things you can control," Ken recalls, "and what you can control is your own performance." Unimpressed with the education afforded blacks in Hempstead's nominally integrated public schools, the Chenaults sent their kids to a small private school, the Waldorf School of Garden City, N. Y. "It created a useful balance for me," Chenault says. "In Hempstead, my environment was predominantly black, while the school was predominantly white."

Chenault attended Waldorf from kindergarten through 12th grade. "As early as middle school, real qualities of leadership became obvious in Ken," recalls George Rose, one of his teachers. "But at the same time, there was a certain quiet within him that won everyone's respect." Chenault was elected class president in each of his last four years, and as a senior captained the basketball, soccer, and track teams.

FAST TRACK. After a year at Springfield College, Chenault transferred to Bowdoin College in Brunswick, Me., at the urging of a Waldorf teacher who had gone there. It was 1970, and America's college campuses were seething with protest. Chenault added his voice to demands that Bowdoin recruit more black students and professors but took issue with the militant black nationalism of his fellow Afro-Am activists. "I never saw Ken falter in the belief that he would get the chance to show his skill and scholarship to the world, which was aggravating, I admit," says Canada, now the president and CEO of Rheedlen Centers for Children, which fights truancy among Manhattan's minority schoolchildren.

After graduating magna cum laude with honors in history, Chenault enrolled at Harvard Law School. He got his law degree in 1976 and landed a job at the tony Wall Street firm of Rogers & Wells. Three years later, he moved back to Boston to join some of his Harvard classmates at management consultancy Bain & Co. "I wasn't bored or disappointed by law," recalls Chenault. "I wanted to try something new: business."

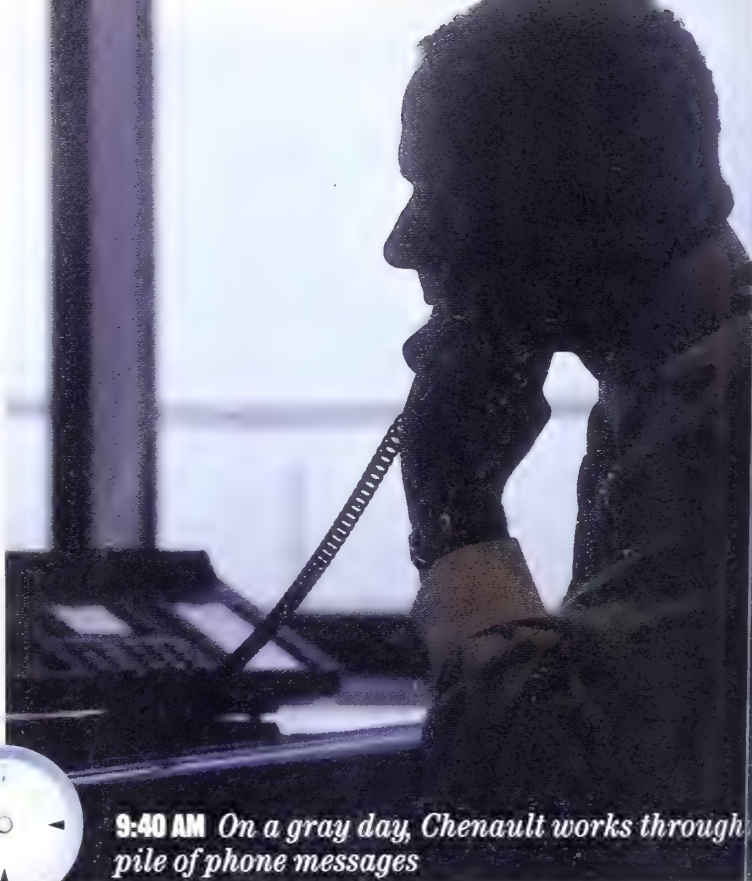
At 28, Chenault had found his métier. At Bain, he quickly was promoted to manager and was put on a fast track to part-

nership, though co-founder Ralph R. Willard doubted that he would be able to hang on to Chenault for long. "Ken had written all over him," Willard says.

In 1981, Chenault accepted a job offer from American Express. At the time, TRS was headed by Louis V. Gerstner Jr., now chairman and CEO of IBM. Gerstner had joined AmEx a few years earlier from McKinsey & Co. and was looking for four or five young hotshots capable of rising to the top while acting as "change agents."

Chenault started in strategic planning department. His first assignment involved TRS's merchant services division, which handled everything from jewelry, stereo equipment, and a wide range of other goods to cardholders' direct mail. Run by a man named Robert "merch services" who was poorly organized, founded as a stepchild of the card business. However, its position intrigued Chenault, who joined Gerstner's dismay, joined the unit as vice-president of marketing when his tony two-year stint in the unit ended. "It was a high-risk opportunity for me in that I had been told him a line job was the heart of the business," calls Gerstner.

A few months later



9:40 AM On a gray day, Chenault works through pile of phone messages



KENNETH IRVINE CHENAULT

BORN 1951, New York City.

EDUCATION BA 1973, Bowdoin College; JD 1976, Harvard University.

FAMILY Married to Kathryn Cassell Chenault, a nonpracticing lawyer. Two sons, Kenneth Jr., 9, and Kevin, 7.

FATHER'S ADVICE ON COPING WITH DISCRIMINATION "You need to really concentrate on the things you can control, and what you can control is your own performance."

CONFESSIONS OF A LATE BLOOMER "It was not until I was 13 or 14 that I began to focus on academics, and not until my 20s did I think about going into business."

AMEX CARD MEMBER SINCE 1976, his last year at Harvard Law School. His first card was gold.

HOBBIES Skiing, tennis, golf, swimming, reading biographies.

LEAST USED TALENT Excellent baritone singing voice.



turned Chenault and his new colleagues by declaring a budget review that he did not think merch services a future at AmEx. Myers was present, but it was ultimately who broke the uneasy silence, asking Gerstner to re-final judgment for 45 days. Led by Chenault, merch es put together a strategic plan and won a stay of execution. Myers was fired soon afterward, and Chenault rehired him. Says DiGeso, the unit's personnel director: "Not did Ken not scheme against Bob, he did everything he to help him." Once he was in charge, though, Chenault hired a half-dozen managers and made wholesale revisions in the line and sales methods. In the two years that Chenault ran merch services, its revenues soared from about \$150 million to \$500 million a year. If not, he was too successful, for many mail-order merchants began threatening to stop accepting AmEx cards. To

his dismay, Chenault then had to dismantle much of what he had built to appease the custodians of AmEx' card business. After unsuccessfully proposing that AmEx spin off the merch-services division as a stand-alone business, Chenault recalls that he was issued new marching orders by Gerstner: "Lou said, 'You're going into cards.'"

From 1986 to 1989, Chenault was promoted three times, managing in succession the gold card/platinum division, the green card division, and the entire consumer card group. Even so, these were frustrating years for Chenault, whose proposals for new marketing initiatives generally fell on deaf ears. AmEx was an old-line company (founded in 1850) that had ruled its lucrative niches in traveler's checks and travel-and-entertainment charge cards for so long that its top

Cover Story

THE OTHER SIDE OF KEN CHENAULT

As a child, Ken Chenault dreamed of becoming a professional athlete. It was not until age 13 or 14 that a grander ambition took hold, inspiring him to devote himself to his studies the first time. "I started to think in terms of wanting to make a difference, of trying to bring about change in the world," Chenault says. He eventually changed American Express Co., helping to save billions of dollars of jobs and thousands of jobs. That is social impact of a high order, but young Chenault had not realized that something was wrong with the world. Righting the wrongs of discrimination—or at least helping to blunt its effects.

While attending Bowdoin College in Brunswick, Me., Chenault made frequent trips to New York City to help organize the American Council on Drug Education, which eventually merged into Phoenix House. So, some of Chenault's activist friends wondered whether someone so obviously destined for high-level professional success would retain his idealism. "The question we left open was, 'Ken was if and when he would care where he wanted to be, would he care about the kind of people he would work with here?'" says former classmate Geoffrey Canada of the Rheedlen Centers for Children & Families, which combats truancy and minority schoolchildren in Manhattan.

The question was answered to Chenault's satisfaction long ago.



CANADA AND KIDS: Chenault is among the top donors to his Rheedlen Centers for Children & Families

Chenault ranks among Rheedlen's largest donors—as does American Express—and is one of Canada's most valued advisers. "I try to be respectful of his time," Canada says. "But when I do call to bat around an idea, I always get to talk to Ken." Chenault also is active on the board of Columbia University's drug research center, the National Center on Addiction & Substance Abuse, and makes frequent inspirational speeches at black colleges, high schools, and grade schools. Even so, he feels he has fallen short of his youthful aspirations. "On a social basis, I have not been as front and center involved as on the business side," he says. "I feel strongly that I have a responsibility to do more over time."

Time has been the problem. About

8 o'clock one night during AmEx' crisis year of 1992, CEO Harvey Golub dropped by Chenault's office to suggest that he should spend more time relaxing. "A lot of us were working very hard," Golub says, "but Ken was working the hardest." Ignoring the boss's advice, Chenault continued to work most every evening and weekend until mid-1996, when he took advantage of AmEx' much-improved performance to spend more time with his family. He and his wife, Kathryn, a former Wall Street lawyer who once worked for the United Negro College Fund, live outside New York City in suburban New Rochelle. They have two sons, Ken-

neth Jr., 9, and Kevin, 7.

At the same time, Chenault has taken up golf—one of the few sports he did not master as a boy. He started a couple years back, when Golub invited him along on a golf trip to Florida. "I didn't play much over the next six months," Chenault says, "but then it finally hit me." Many lessons later, he's got his handicap down to 19 and is part of a foursome that regularly golfs at such exclusive Long Island clubs as Shinnecock Hills and the National Golf Links. "If you'd asked me two years ago, I would have said it will take Ken 10 years to improve his game to where it is now," says friend and foursome member John Utendahl. "But when Ken commits, he really commits." No kidding.

By Anthony Bianco in New York

Chenault once flew from New York to San Francisco on a few hours' notice to take an unhappy client to dinner

management saw no need to innovate. "It was hard even to engage people in a discussion of who our competitors were," Chenault recalls. "The attitude was: 'We really don't have a competitor. We are unique.'"

Chenault belonged to a rising generation of AmEx managers who saw MasterCard International and especially Visa USA as a dire competitive threat. By the late 1980s, the bank-card associations were flooding the market with a myriad of low-fee cards offering frequent-flier miles, shoppers' discounts, and other benefits. Not only was American Express finding it harder to sign up new accounts, but its existing members were using their cards less and less.

HIGH GROUND. Within AmEx, a great debate raged over the issue of how to restore growth to the card business. Chenault and his pro-change peers made some headway as AmEx introduced a revolving credit card, Optima, and began broadening its merchant base by adding mass-market retailers. But they were opposed by higher-ranking traditionalists who argued that AmEx should retreat to its T&E niche and hunker down. While Chenault was steadfast in his advocacy, he made his case judiciously. AmEx was not a place where even someone at his level could vehemently dissent without risking retaliation from above. "Ken clearly was among the group pushing for change, but he wasn't the most radical of us," says Roger H. Ballou, a former colleague who is now CEO of Global Vacation Group.

In mid-1989, Gerstner abruptly resigned to head RJR Nabisco Inc. and was replaced at TRS's helm by three co-CEOs—a stopgap measure that only exacerbated the unit's woes. Amid the disorder, Chenault captured the conceptual high ground by sponsoring a series of studies that represented the first real attempt to gauge TRS's performance by such external measures as market share of total plastic spending. To Chenault, anyway, the evidence was clear: The AmEx brand was fading fast.

In 1991, a gradual decline in TRS's profits accelerated into a rout as AmEx had to write off \$265 million in bad loans made to Optima cardholders. Worse, merchants' long-smoldering resentment at AmEx' high-handed treatment and steep transaction fees flamed into open revolt in Boston, where a group of 100 restaurants captured front-page attention by threatening to boycott AmEx. Soon, angry merchants all across the country were hurling ultimatums at AmEx, which faced the corporate equivalent of a run on the bank.

Robinson summoned Golub from Minneapolis and made him president of AmEx and CEO of TRS. Golub emerged from

a hurried round of meetings at headquarters with new resolve for Chenault. "It was his courage I noticed first," Chenault says. "He was the only one at TRS who was standing up and saying, 'Here is the problem.'" Chenault was no less impressed, finding Golub's incisiveness liberating after his of trying to "penetrate the wall of arrogance" within. "Harvey is a fact-based person," he says. "With him, I sit down and give it to him straight."

Golub added to Chenault's duties by putting him over Establishment Services Div., which managed TRS's fr



NOON Chenault lunches with rank-and-file employees during a freewheeling "meet the president" session

merchant relationships and was far and away AmEx' source of revenue and operating income. At the time, the ideal merchant was paying back to AmEx 3.5¢ of every dollar charged on one of its cards, compared with 2¢ for Visa or MasterCard. AmEx' premium 3.5% "discount rate" was a product of the upscale image it had cultivated and that its typical member outspent his or her bank-card counterpart by a margin of nearly 3 to 1.

GAME MASTER. Chenault made Tom Ryder the new manager of Establishment Services. Ryder immediately imposed a moratorium on the signing of new accounts naming what had been a key bonus criterion) and insisted salespeople bend over backward to cater to the elite clientele. A group of 16 sales managers went to Chenault with an ultimatum: Lose Ryder or you will lose us. Chenault declined the need for fundamental change and then delivered his own ultimatum: Get with the program or find a new job. All but a few of the 16 remain at AmEx today.

To placate the angriest and most important merchants, Ryder often turned to Chenault. He went to great lengths to smooth ruffled feathers, once flying from New York to San Francisco on a few hours' notice to take a client to dinner. Still, he made only nominal cuts in discount rates. His approach was tested by many of AmEx' biggest customers, in

Cover Story

te Airlines Inc. CEO
 M. Wolf, who threat-
 stop accepting AmEx
 as less United's discount
 s slashed, according
 n Aaron, then Unit-
 rketing chief. "Ken
 t, 'It will be interest-
 watch you try to sur-
 hout American Ex-
 Aaron says. "It was a
 chicken, and United
 down."

TRS management
 in March, 1992, Golub
 hat if the division did
 its annual operating
 \$1 billion over the
 ree years, AmEx
 oe out of business."
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 impression that it
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 sis. "The figure was
 what I thought it
 d like for us to
 isa's discount
 f had to," Gol-
 'But I had no
 we were go-
 that. None."

rden of identifying and implementing cuts fell main-
 ult as the senior card executive. Each of TRS's four
 s—green card, gold card, platinum card, and trav-
 ecks—had its own sales, marketing, and processing
 mid-1992, Chenault started the daunting task of col-
 ese four principalities into a single, leanly staffed
 promptly took a \$342 million restructuring charge
 nated 4,800 jobs. This amounted to fully 9% of
 orkforce, but the pain was just beginning.

S. In early 1993, AmEx' board oust-
 binson and moved Golub up to chair-
 EO. Promoted to president of TRS,
 out the card business into high gear
 nder his direction, the type of cards
 es soared from 4 to 60 in a few
 e. The vast majority of AmEx' new
 ere "co-branded" cards bearing not
 amiliar blue box but the logos of
 issuers as Delta Air Lines, Peu-
 ers, and the New York Knicks. At
 ient Services, meanwhile, the focus
 n damage control to expansion. The
 new merchant accounts doubled to
 1993 from 30,000 the previous year
 n running above 400,000 a year. Al-
 nEx' discount rate has fallen to
 , it remains considerably higher
 or MasterCard's.
 enault's 1995 promotion to vice-
 f American Express, the restruc-
 e that he led broadened beyond
 mpass every part of the company
 ed to include every managerial sys-
 ork process. At its peak, 300 of
 t talented managers were assigned
 ct, and Chenault frequently had to
 uthority to overcome grassroots



1:30 PM *Chatting with employees as the lunch meeting breaks up*



CHENAUTL'S ACCOMPLISHMENTS

- Led a restructuring drive that redeployed \$3 billion in spending
- Increased the number of cards AmEx offers to 60 from 4
- Defused a merchant rebellion without a big cut in fees

KEY CHALLENGES

- Accelerate revenue growth to build the scale needed to remain independent
- Reclaim market share lost to Visa and MasterCard by enticing their members into the AmEx network

opposition to particular re-
 forms. In the end, not \$1 bil-
 lion but \$3 billion in cost was
 eliminated, along with 15,800
 jobs. "Ken took the re-
 engineering bit in his teeth
 and really made it happen,"
 says Philip J. Riese, who suc-
 ceeded Chenault as president
 of the consumer-card group.
 "And yet people really don't
 recognize reducing headcount
 as a Ken-like activity."

Partly this is because of
 the way he handled the lay-
 offs. Chenault personally vis-
 ited each of TRS's nine oper-
 ating centers and explained
 at length why cutbacks had
 to be made. Employees slated
 to lose their jobs were noti-
 fied as soon as the decision
 was made—resulting in ad-
 vance notice of as much as 18
 months. What is more, AmEx
 continued to grow on balance
 as the \$3 billion in savings
 was wholly reinvested with-
 in the company. In fact, total
 employment rose to 73,620 in
 1997 from 61,108 in 1991.

Although AmEx is again a
 formidable competitor in the credit-card wars, its brand po-
 sition remains fundamentally tenuous. As measured by the
 value of purchases made, Visa commands 53.9% of the world-
 wide card market, vs. 49.2% in 1994, according to *The Nilson
 Report*, a credit-card industry newsletter. Visa's gains have
 come at the expense of MasterCard, which now has 28.3% of
 the market. AmEx ranks third, holding steady at 13.7%.

AmEx could add handsomely to its share by deluging the
 market with cut-rate cards. But rather than sacrifice AmEx'
 profit margins on the altar of transaction vol-
 ume, Golub and Chenault are doggedly imple-
 menting a strategy they call "opening the net-
 work." Essentially, it is an attempt to entice
 the very banks that are members of the Visa
 and MasterCard networks to issue cards in
 partnership with AmEx, and it may be the
 company's last best hope to substantially nar-
 row the market-share gap.

TIES THAT BIND. From a standing start two
 years ago, AmEx has struck up card-issuing
 alliances with 38 foreign partners, including
 such banking giants as Crédit Suisse and Na-
 tional Westminster Bank. However, in the
 U.S. it has been thwarted by Visa and Mas-
 terCard bylaws that prohibit member institu-
 tions from participating in any other card net-
 works. In October, the Justice Dept. filed an
 antitrust suit against Visa and MasterCard,
 alleging, among other things, that their ex-
 clusionary rules have unfairly stifled competi-
 tion. Visa and MasterCard are contesting the
 allegations.

If the open network strategy fails to add
 handsomely to AmEx' revenues over the next
 few years, the company likely will seek a
 merger partner well before Golub turns 65 in
 2004. In 1996, Golub instigated merger talks

with Citicorp, the world's largest Visa and MasterCard issuer. Unwilling to pay the premium price that Golub sought, Citicorp merged with Travelers Group Inc. instead. How

Chenault might fare in a future megamerger is anybody's guess. He is well aware of the

Cover Story

fate of Travelers wunderkind James Dimon, who was considered a lock to run Citigroup until the very day he was let go in October.

Over the years, Chenault has been besieged with offers from executive recruiters representing one corporate giant or another. His commitment to AmEx will be tested again in the coming years, but it would take a breathtaking offer to break the ties that now bind Chenault to AmEx. "I have a psychic investment in its success," he says. Patience and persistence have been hallmarks of Chenault's career. That's not likely to change now that he is one step from the top of the mountain.

By Anthony Bianco in New York

INVISIBLE IN THE EXECUTIVE SUITE

In *An American Dilemma*, his classic 1944 study of race relations in the U.S., sociologist Gunnar Myrdal revealed the plight of aspiring black "managers of industry" who "have to work in the white economy which does not want Negroes in such positions."

Half a century later, African Americans have gained scattered footholds in Corporate America—but the corner office remains an exclusively white preserve. And executives of Kenneth Chenault's stature, with the clout and connections to take on big-time CEO jobs soon, remain very much the exception.

True, Franklin D. Raines will become Fannie Mae's CEO on Jan. 1 after two years at the Office of Management & Budget. Richard D. Nanula, who left a soaring career at Walt Disney Co. to join Starwood Hotels & Resorts Worldwide Inc., is prime CEO timber. Lloyd Ward is expected to land the CEO job at Maytag Corp. next summer.

NEAR MISSES. Beyond that intimate fraternity, though, there's a stark void. The federal Glass Ceiling Commission reported in a 1995 study that blacks held just 0.6% of senior executive posts. Membership of the Executive Leadership Council, composed of big-company black managers within three reporting levels of the CEO, has boomed in the 12 years since its founding—but only to a total of 193. Black representation on corporate boards, the council says, has expanded modestly, but not on key committees.

In the past decade, moreover, CEO hopefuls such as McDonald's Robert M. Beavers Jr., Corning's Hayward R. Gipson Jr., and Montgomery Ward's Roland C. Baker have, one by one, faded. On Nov. 14, A. Barry Rand, a highly regarded executive

vice-president, announced he would leave Xerox Corp., having made clear his disenchantment when the company hired IBM marketer G. Richard Thoman last year as Paul A. Allaire's heir apparent.

Why are the ranks still so thin at the top? Some advocates argue that the old white boy's club isn't yet comfortable enough with minorities

number of black college graduates and MBAs has swelled over the past two decades, and increasingly vigorous networks "offer tremendous opportunities for insight and advancement," says Curtis J. Crawford, who left a senior post at Lucent Technologies Inc. last year to take charge at chipmaker Zilog Inc. David Thomas, professor at Harvard business school

CEO MATERIAL

Leading black executives and their career prospects

ANN FUDGE The first black woman to crack the top corporate ranks, she heads Philip Morris' Maxwell House Coffee unit.

PROSPECTS: Very strong candidate.

RICHARD NANULA After starring at Disney, he joined Starwood Hotels this year as president. **PROSPECTS:** He's young (37), but he's top-notch.

FRANKLIN RAINES Will get the CEO post at Fannie Mae on Jan. 1 after two years heading the Office of Management & Budget. **PROSPECTS:** He's cracked the ceiling.

A. BARRY RAND Top sales exec quit Xerox on Nov. 14, a year after the company hired Richard Thoman as CEO-in-waiting. **PROSPECTS:** He'll find a great job—but maybe not as CEO.

ROY ROBERTS Heads General Motors' North American sales and marketing. **PROSPECTS:** The best of any black in the industry but still not great.

LLOYD WARD Former Pepsi exec was named Maytag's president last February. **PROSPECTS:** The CEO job is his to lose.



RAINES: Back to business

to include them in critical mentoring relationships.

"The pipelines to promote African Americans are not in place," says Ella L.J. Edmondson Bell, professor at the University of North Carolina at Charlotte.

Explicit racial bias likely impedes progress, too. More than half of senior minority executives surveyed by recruiter Korn/Ferry International and Columbia Business School reported observing "a double standard in the delegation of assignments" or "harsh or unfair treatment of minorities by whites."

Still, there is cause for hope. The

argues that compared with their predecessors, today's top black managers are more often in core operating roles and so on a true "CEO trajectory."

Yet in most industries, blacks remain invisible. That's business' loss. "There is a wealth of capability and experience that is not being utilized to its fullest in Corporate America," says Adriane M. Brown, 40, who was promoted on Dec. 3 to run Cornin Inc.'s \$400 million environmental products division. "I still look for the day when you will not consider [a promotion] a news story."

By Keith H. Hammonds in New York, with bureau reports

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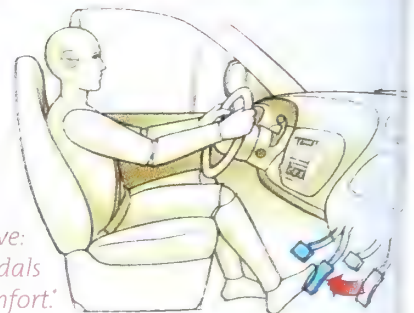
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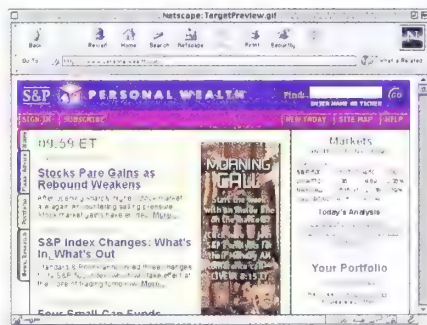
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WAREHOUSE KES MUSIC

early October, CD Warehouse (W) shares tumbled to 5—after a 25% drop in mid-July. The stock was down as part of the stock market's late-summer slide. But in early September, it started gaining and by October 8 was back at 21. The reason behind the stock's sharp snapback: With considerable help from IBM, its partner in the joint venture, CD Warehouse is at the point of launching a Web site that will use CDs on the Internet—in preparation for Christmas. The company operates 302 stores in 40 states that sell used CDs.

By setting up an IBM-designed Web site, CD Warehouse will become the first pre-owned-music-CD site on the Internet, says a New York investment banker who has been buying shares. In its current operations already profitable, CD Warehouse will become a dominant force in the used-CD market," says S.

Web site, which will give customers fast access to a wider selection of CDs, will integrate IBM's various services with CD Warehouse's existing plans. For instance, IBM's Commerce Server will enable CD Warehouse customers to conduct transactions and make secure credit-card transactions. And IBM's MQSeries messaging software will manage the movement of orders and track inventory data among all the CD Warehouse stores.

Says CD Warehouse CEO Jerry Grizzle: "We're sure the sales over the Internet will be huge—and very profitable. We reap 100% gross margins on CDs." He adds that 70% of sales come from used music disks. The supply of CDs will come mainly from own customers as well as from buy and sell CDs.

Analysts expect that CD Warehouse will earn 30¢ to 40¢ a share in

1998 and 50¢ to 55¢ in 1999, up from 1997's 23¢. And these figures don't include earnings from Internet sales.

DYNAMISM AT SECURITY DYNAMICS

The sharp growth in E-commerce has produced a throb of security headaches. So some pros see opportunities for Security Dynamics Technologies (SDTI), which makes products to protect computer data. Since Oct. 8, its stock has leaped from 6 to 19.

That rapid rise doesn't faze the bulls, who think Security Dynamics may again reach its 1997 peak of 44 during the next 6 to 12 months. "The stock could go back to its old high for two reasons," says one San Francisco money manager: There's a huge market for its products. And "the company could be a takeover target."

Through its RSA unit, Security Dynamics makes cryptographic and electronic data-security products. Security Dynamics also licenses its technology to manufacturers. Microsoft, for instance, embeds the encryption on its Windows NT system, Intuit uses it on Quicken, and Netscape has it on the Netscape Navigator. Security Dynamics' products use a patented smart-card technology and access controls that authenticate users' identity.

To ward off unwanted suitors, Security Dynamics has authorized the buyback of 4 million shares. The company has \$150 million in cash, or \$3.50 a share, notes Dawn Simon, an analyst at Brown Brothers Harriman, a New York investment firm. It also owns a minority stake of 4.4 million shares in VeriSign, a provider of digital solutions and infrastructure to conduct secure commerce over the Internet.

James Wade of BT Alex. Brown estimates Security Dynamics will earn 51¢ a share this year and 70¢ in 1999. At its current price, says Wade, "the stock is significantly undervalued."

TOWARD SAFER E-COMMERCE



DATA: BLOOMBERG FINANCIAL MARKETS

E TEMPO CKING UP



DATA: BLOOMBERG FINANCIAL MARKETS

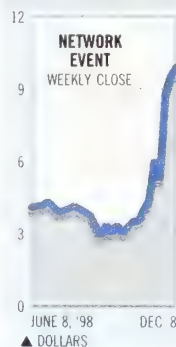
BIG NETWORK ON CAMPUS?

How about a Web site for the 15 million students enrolled in 3,000 U.S. colleges and universities—where they can obtain all kinds of information and services, ranging from college registration, library research, textbook search, and shopping in campus stores and eateries? This is exactly what Harlan Peltz, chairman and CEO of Network Event Theater (NETS), has started to set up with Ben Bassi and Bill Townsend. Both were part of the founding management at Lycos, the fourth-largest Internet company. No wonder Network's stock—lagging between 2 and 3 earlier this year—has zoomed to 9. The Internet unit is expected to be launched in the next few weeks. The talk is that Network Event will then take the new operation public in an initial public offering.

Network Event already communicates with college kids through its network of campus theaters, giant wallboards that carry ads, and a national college magazine. Microsoft, AT&T, and Nike are among the advertisers in Network's theaters and on its billboards. With the Net, Peltz aims to link up a student's class schedule, book lists, extracurricular activities, E-mail, and campus services.

Network is expected to post sales of \$17 million for fiscal 1999 and a loss narrower than last year's deficit of 69¢ a share. Revenues in fiscal 1998 were \$11.2 million. The Internet unit, says Peltz, should make money in two years. Some big investors had stakes in the company even before the Internet idea: Warburg Pincus Asset Management owns 9%, George Lindemann about 6%, Al Taubman 6.5%, and John Hancock Advisers 7%. Peltz owns 21%.

SCHOLARLY INTEREST



DATA: BLOOMBERG FINANCIAL MARKETS

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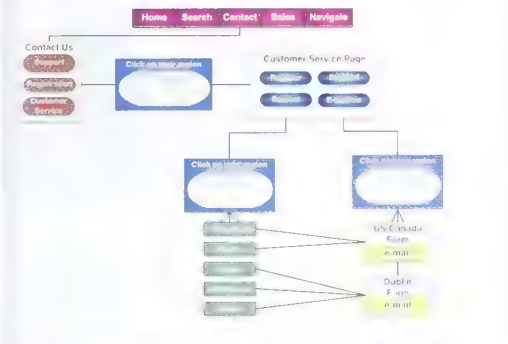


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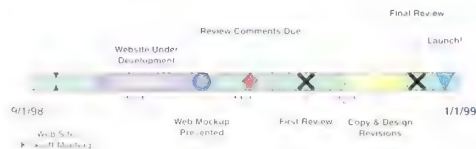
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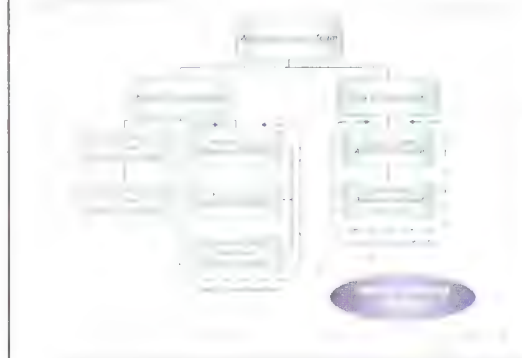
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COMMENTARY

By Michael J. Mandel

FINANCIAL SERVICES: THE SILENT ENGINE



From the stock market to the mortgage market, financial-services industries rivet the attention of Americans. Yet the financial-services boom shows up everywhere but in the economic statistics. According to the official numbers from the Bureau of Economic Analysis (BEA), the output of the broad banking sector—banks plus related industries, such as nonbank credit-card issuers and mortgage bankers—has been flat since 1990 (chart). Measured output of the mutual-funds and investment industry is up, but still only accounts for about 1% of gross domestic product.

But the stagnation shown by the official data is very misleading: Virtually every real-world measure indicates that the output of financial services has actually exploded (charts). For example, consumer credit is up by some 60% over the past eight years, as credit cards become widely accepted in such places as grocery stores. Mortgage-refinancing applications are soaring, as the introduction of automated mortgage underwriting makes refinancing far cheaper and faster. The number of transactions at automated teller machines has almost doubled

The boom in the finance sector shows up everywhere but in economic statistics. And that means growth has been understated

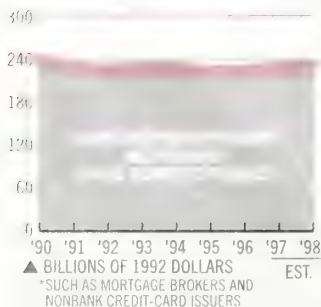
since 1990, even while the number of commercial bank offices and branches has actually increased by 11%. And perhaps most telling, the financial sector, which also includes insurance and real estate, has generated almost 18% of total corporate profits in the 1990s, up from only 11% in the 1980s—hardly the mark of a stagnant industry.

PRODUCTIVITY PARADOX. The undercounting of financial-services growth is critical for understanding what is really going on in the economy. For one, it means that economic growth in recent years has been underestimated. Based on academic and government research, the true growth rate in banking could be anywhere from 5 to 10 percentage points higher than the official numbers. Assuming this applies to related industries as well, it could add as much as 0.3 percentage points, or \$25 billion, to GDP each

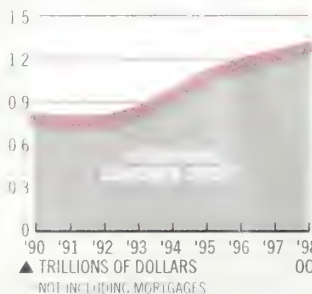
year. It would also push productivity growth higher by about the same amount.

Moreover, the flawed data on financial-services output may help explain the so-called productivity paradox: the apparent inability of computer technology to boost productivity. In real life, technology clearly makes a big difference. For example, Mastercard International now can handle 8.3 billion transactions annually, double the 1994 volume, using only about 20% more workers. William I. Jacobs, executive vice president of global resources. Financial-services firms are among the highest-tech users, spending nearly \$60 billion annually on information technology, notes Jim Moon, services-industry vice-president at Gartner Group. Yet any productivity gains from such huge investments

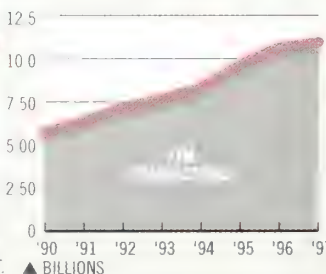
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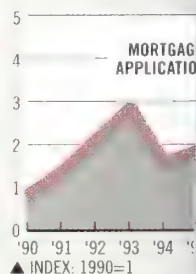
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THE INTERNET

NOT SO ODD A COUPLE AFTER ALL

AOL-Netscape's vision for E-commerce comes into focus

A week after announcing the acquisition of Netscape Communications, America Online CEO Stephen M. Case addressed an all-hands gathering of its 2,300 employees. Bounding onstage, he wisecracked that the denim jacket he wore, emblazoned with the Netscape logo, "only cost me \$4.2 billion."

Though good for a laugh, the gesture still leaves hanging exactly what AOL thought it was buying. Electronic commerce was the rallying cry behind AOL's Nov. 24 acquisition announcement and the accompanying agreement by Sun Microsystems Inc. to sell and help develop Netscape software. But the fit between a consumer online service not known for its technological prowess and Netscape, which makes about 70% of its annual revenue from corporate software sales, is hardly obvious. "It's not clear to me what AOL sees in owning a software business," says Karl Sahnoske, general manager of rival IBM's Electronic Commerce Group.

EXPRESS ROUTE. But now, as the smoke clears, it's coming into focus. In the works is a radical vision that the E-commerce world is only starting to wake up to: The troika could do much more than simply help companies hang their shingles on the Web. The partnership also aims to tie these online storefronts into each companies' back-end operations—everything from internal inventory controls to communications between



The key is linking customers' back-office operations, from the warehouse to the welcome mat

suppliers to automating customer service. A company's entire business—from the warehouse to the welcome mat—could be conducted in cyberspace.

And the trio could grow rich in the process. Sales of E-commerce software are pegged at \$3.8 billion in the U.S. by 2002. But that's just a fraction of the real prize: Heavy-duty back-office software linked to the Web, including servers, software, and services, is expected to top about \$63 billion by 2002,

ed up by official numbers. ure, the government's numbers improving. The Bureau of La- ics just introduced a new price roperty-and-casualty insur- ums, which will lead to better f real growth in the insurance ver the next couple of years, e and real growth statistics ut for life insurance, invest- ng, and mutual funds.

for the banking sector, how- ill a disaster. Right now, the res output growth of the ing sector by the number of ours worked in these indus- result, productivity—which is led by hours—is effectively e flat.

DISPUTE. Unfortunately, t everyone agrees that pro- up sharply, there is no agree- w to fix the numbers. "There's edible dispute about how to e output of a simple bank that its and makes loans," says lett, a former BEA chief econ- t The Brookings Institution. icians argue that loans pro- y output from banks, since de- mselfs don't make money. mists find the idea that depos- eeive services from holding in a bank to be ridiculous. much of the technology in- recent years has gone into ew services and products cutting prices of existing ample, rather than lowering lacing branches with ATMs, lysts predicted in the early have increased the number ches and ATMs. The result: stomer convenience, which d substantial value—but is for statisticians to measure. ms to be a fundamental am- out the role of financial se- economy. If Dell Computer ore computers, that is taken iguous positive for the econ- anks issue more credit cards e loans, there is a fear that ng on too much risk that in the health of the economy. ay be prudent to worry assuming too much risk, ood reason to omit their owth from the numbers. Fi- es are vital to growth—and e counted that way.

lows the New Economy from

according to International Data Corp.

It's a tasty morsel that Netscape had spied already. It has racked up more than 150 customers for its E-commerce software, but that pales beside the 2,000 customers that have licensed Microsoft's basic E-commerce product, Site Server Commerce Edition. With AOL and Sun, though, Netscape's vision suddenly has oomph. Sun's 7,000-person hardware-and-software sales team, combined with AOL's instant access to 14 million potential online customers, could induce more companies to go virtual.

"We're the only one with an end-to-end solution," says AOL President Robert W. Pittman, who will oversee Netscape's operations.

Citicorp is already a believer. The company markets such services as banking and insurance to consumers via Netscape's Web portal, Netcenter, while also licensing \$20 million worth of Netscape software for its business-to-business sales. That allows Citicorp to offer a variety of choices to its corporate and consumer customers. For instance, Citicorp can work with corporate customers to develop electronic-billing systems using Netscape software—and the billers can then offer that option to consumers. "There's a continuum between consumer and corporate E-commerce," says Josh S. Grotstein, division executive for global Internet and E-commerce programs for Citigroup.

The AOL-Netscape combo could also prove enticing to Netscape customers that haven't yet bought its full array of software. Visteon, for example, the \$17 billion auto-parts division of Ford Motor Co., uses Netscape's software to handle such tasks as invoice transactions and shipping notices for suppliers and customers. As part of a goal of reaching consumers and suppliers electronically to be more efficient, Visteon is considering using the Netcenter portal.

Still, some industry experts are skeptical that corporations will be beating down the troika's doors. While AOL's au-

dience is substantial, the online giant seems to bring little tech knowhow to the table to help Netscape and Sun build such a sweeping infrastructure. "It will be bad news," says Forrester Research Inc. analyst Stan Dolberg. "The software business will be in this weird triangle where Sun will be in charge but not owning it, and AOL will own it but not be in charge."

Indeed, many analysts have concluded that AOL was forced by accounting rules to buy Netscape's software unit just to

sell basic E-commerce software to other software makers add program. "There isn't another company [besides Netscape] with that breadth of applications or depth of functionality," says Chuck Shih, research director at analyst Group Inc.

NOT A SNAP. To be sure, there are advantages to Netscape's approach. Many out-of-the-box suites, Netscape's product isn't considered easy for companies to tailor, while software from IBM and Microsoft can be more simply

customized. IBM's hefty professional sales-and-service corps of 118,000 people help do just that. And Microsoft's commerce software, used by the popular Windows NT, snags together easily with software and services offered by Microsoft's business partners. "Microsoft provides the building blocks," says Lora Ziback, an Internet commerce manager at Dell Computer Corp., "and uses Microsoft technology to build Web site that handles business-to-business sales."

But Microsoft's Achilles' heel is that Windows still isn't considered as robust as the Unix systems offered

Sizing Up the E-Biz Landscape

| COMPANY | WHAT THEY OFFER | HOW IT STACKS UP |
|--|--|--|
| 
AOL/NETSCAPE | CommerceXpert suite of server-software products, priced from \$75,000 to \$250,000, lets a company set up shop online and swap information between employers and suppliers while automating business tasks such as inventory management. Netcenter business portal provides a virtual trading arena. | The suite is comprehensive, though not easily customized. AOL's 14 million customers will help draw people to the portal. Sun's distribution of the software through its 7,000 salespeople also gives it a broad reach. Still, Netscape is designed primarily to work on Sun's heavy-duty Unix software. |
| 
MICROSOFT | Windows NT-based programs help companies on a range of E-commerce fronts, from setting up a storefront to running a Web site. They work with Microsoft Backoffice software for heavy-duty jobs and with software from 1,300 partners. Costs range from \$25,000 to more than \$1 million. | Not as complete an offering as Netscape's, and Unix is seen as better able to handle scads of transactions. But the thousands of Windows developers give companies a wide variety of software choices and knowhow. Microsoft's MSN.com portal site also gives retailers an outlet to bring in customers, though it trails AOL's reach. |
| 
IBM | Much like Microsoft, IBM's Net.commerce helps companies set up shop online and handle orders. Software and services can then be added from about 1,000 IBM partners. Costs run from \$25,000 to \$10 million. | IBM's software works on a variety of computers, including different flavors of Unix and Windows NT. Has established clients in many industries. Still, IBM lacks the portal piece to help merchants reach more customers. |

get the valuable browser and portal. AOL denies that motivation. "We had no thought about disposing any part of the Netscape business," says AOL Chief Financial Officer J. Michael Kelly. "Each piece is absolutely strategic to us."

In any case, AOL, Netscape, and Sun face stiff competition. Netscape already competes with giants Microsoft Corp. and IBM as well as with a host of small companies that offer E-commerce software for specific needs. Netscape's approach is to offer an integrated suite of programs that provide a soup-to-nuts solution. That's different from the strategy of both IBM and Microsoft, which

IBM and Sun. And some experts consider IBM as strong in business-to-business E-commerce solutions.

That means that Netscape's software, pushed by Sun and AOL, may have to run, but only if the Sun-AOL-Netscape alliance really jells. Many of Netscape's plans are still experimental. Sun and AOL have to prove they can keep the software moving forward. If they do, the AOL-Netscape-Sun partnership may have the most ammo. But the gambit works, E-commerce could come of age a lot sooner.

*By Heather Green in New York
Catherine Yang in Washington*

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0.22mm horizontal | 0.28mm dot
0.26mm horizontal |
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EVIDENCE POLLUTION THS

SICS EXPERTS USE DNA to track murderers bbers. And if Dan E. a biology professor at State University is iful, detectives may se DNA to solve envi- tal crimes. He has ed a quick and accu- A test for ecosystem nation. gauge pollution, he up and compares DNA s from a dozen or ayfish—as opposed to victims. Contamina- ane and other scien- ; reduces biodiversity osystem. As a result, NA collected from dif- ayfish would look al- actly alike. Converse- ss damage there is environment, the t the crayfish popu- nd the more diverse A samples. mice, earthworms, er insects may be eveling bio-barome- id what efficiency! environmental sur- lay last weeks or und require a whole scientists. Krane's test, on the other n be completed in by just one person. collaborating with onmental Protection o develop a DNA test y regulators world- ould be on the mar- in two years. □

A PROGRAM THAT NEVER FORGETS A FACE

CROOKS WON'T BE ABLE TO HIDE BEHIND MASKS, FAKE beards, and other disguises if new face-recognition technologies deliver on their promises. These devices can automatically identify bad guys on the basis of features inherent in the structure of their skulls—features that can't be altered except by radical plastic surgery.

One of the technologies is the "face-print" algorithm developed by Visionics Corp. in Jersey City, N.J. It creates a cranial blue-print using 140 measurements of various parts of the face, such as the distance from the eyes to the nose. Once criminals have had their mug shots mapped, the system can tag them even on fuzzy videotape. If a ski mask obscures enough measurements to preclude a positive identification, the computer can still spit out a short list of suspects.

Visionics says its technology is currently being tested at an airport, scanning crowds for terrorists or crooks. Zeda ABM Ltd. in Lichfield, England, uses the Visionics software in its Profile system, which is now being evaluated by British police. Meanwhile, Miros Inc. in Wellesley, Mass., recently delivered a rival system to Scotland Yard for evaluation.

Heidi Dawley



WHEN THE SECONDHAND SMOKE CLEARS

IT IS WIDELY ACCEPTED THAT SECONDHAND SMOKE CAN lead to lung cancer and heart disease. Now there's evidence that constant exposure also causes bronchitis and impairs lung function. In the Dec. 9 issue of *The Journal of the American Medical Association*, researchers from the University of California at San Francisco report that concentrated doses of secondhand smoke irritate the eyes, nose, and throat, and diminish lung capacity, so that a person must take shallower breaths more often to get the same amount of oxygen.

The study zeroed in on bartenders, who are exposed to about five times more secondhand smoke than the average person. Scientists monitored the respiratory symptoms and lung capacities of bartenders before and after California passed a law making bars smoke-free. One month before the law went into effect, 75% of the 53 bartenders reported respiratory ailments such as wheezing and coughing. Just one to two months later, 59% were completely symptom-free. Lung function also improved significantly, even for bartenders who were smokers themselves. Public health experts hope the study will spur legislators in other states to pass laws that protect workers from secondhand smoke. □

INNOVATIONS

■ The roundworm *Caenorhabditis elegans* may be tiny—smaller than the head of a pin—but it's big news in the Dec. 11 issue of *Science*. U.S. and British researchers say they have completely deciphered the worm's genetic code. This is the first time scientists have mapped out the genetic program of an animal that, like humans, uses sex to reproduce and has complex organ systems, such as a digestive tract and a nervous system. It took almost a decade for the researchers, who received funding from the Human Genome Project, to analyze the genetic material contained in the worm's six chromosomes. Only about 40% of the genes that have been identified and analyzed have counterparts in other organisms, including humans.

■ First it was sheep, then mice, and now cows. Researchers in Japan say they have devised a highly efficient cloning procedure, allowing them to create eight calves from the cells of one adult cow. When Scottish researchers cloned Dolly in 1997, it took 277 tries to create one lamb. But the Japanese team, which published their results in *Science* (Dec. 11), was successful in 8 of their 10 attempts. Such efficiency is critical for the large-scale production of genetically identical livestock that will share a desirable trait, such as good meat or milk production. Biotech companies hoping to transform animals into pharmaceutical factories—such as PPL Therapeutics, Genzyme Transgenics, and Pharmingen—are likely to be interested, because their current cloning procedures result in far more dead or deformed animals than successful live births.

NUTRITION

JUST LIKE MOM USED TO ENGINEER

Companies are betting big on disease-fighting foods

Some products being cooked up by big foodmakers don't exactly set the mouth to watering. There are tomatoes enhanced with the potential anticancer nutrient lycopene. Eggs enriched with heart-healthy omega-3 fatty acids. Margarine with cholesterol-lowering substances. Yogurts containing "good" bacteria to ward off bad microbes.

Welcome to the brave new world of "functional foods." Kellogg, ConAgra, Mars, Zeneca, DuPont, and several other food and pharmaceutical companies are rushing to engineer foods that go beyond good nutrition to offer some enhanced health benefit. Market researcher Kalorama Information LLC expects sales of foods bought for their healthy properties to reach \$17.6 billion in 2001, from \$15.2 billion in 1998. "This is growing into a mass market faster than people anticipated," says Clare M. Hasler, head of the functional-foods research program at the University of Illinois.

But the functional-foods phe-

nomenon poses considerable challenges. Consumers will have to sort through a confusing barrage of messages about what to eat, while foodmakers must deliver the health benefits they are promising without compromising taste.

Kellogg is mounting one of the most ambitious attempts to build a better food. In February, the cereal giant will begin shipping a line of cholesterol-lowering foods, under the brand Ensemble. Most Ensemble products, which include frozen entrees, bread, cereal, and desserts, contain a soluble fiber called psyllium, derived from certain wheat husks, that has been proven to lower cholesterol. Kellogg and others launched psyllium-containing cereals a decade ago, igniting a controversy that led to stricter Food & Drug Administration rules about health claims made for food. In early 1998, the

FDA approved psyllium health claims. Kellogg submitted more than 50 studies showing that the fiber, as part of a diet low in cholesterol and saturated fat, can reduce the risk of heart disease.

But good science doesn't guarantee success in the food business. Although consumers have embraced some health-boosting products, such as Tropicana's orange juice enriched with calcium, taste still rules. Take Campbell Soup Co.'s discontinued Intelligent sine frozen entrees. After pumping \$10 million into a line of foods proven in clinical trials to lower blood sugar, cholesterol, and blood pressure, Campbell pulled the plug on the brand in May 1998. A spokesman for Campbell says the line was pulled because the company is focusing on its core soup business. Gary Stibel, founder of the New England Consulting Group, says the line failed largely due to lack of flavor and variety. "Real questions remain as to whether consumers will pick products purely based on perceived health benefits," admits R. David C. Macnair, Campbell vice-president for global research and development.

Thanks to a tricky regulatory environment, functional-foods players must also be careful how they define their products. Some offer them as dietary supplements, which are governed by different rules than many foods. Monsanto, for example, began selling an omega-3 fatty acid to dietary-supplement retailers.

TROPICANA

Has had an early functional-food hit with its calcium-enriched orange juice

JOHNSON & JOHNSON

Developed Benecol, a cholesterol-lowering margarine—blocked for now by the FDA

DUPONT

Markets a protein-based drink to cut the risk of heart disease—can be used in beverages

KELLOGG

Launching a brand of cholesterol-lowering cereal that contains the fiber



f there's the tiniest little hole in your net, they'll find it.

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in early 1998. Typically found in fish, omega-3 fats are known to lower triglycerides, compounds that scientists believe play an important role in heart disease. And ConAgra, in Omaha, introduced Culturelle capsules as a dietary supplement in September, though it may eventually offer the product in foods such as yogurt. Culturelle is a strain of good bacteria that can survive the acid in the stomach to fight off bad bacteria.

Once such ingredients are put into foods, however, the rules may change. The FDA can bar a food if it contains additives that haven't been proven safe—a right it exercised in October, when it blocked Johnson & Johnson's plans to sell Benecol margarine. Benecol contains the cholesterol-lowering ingredient stanol ester, derived from plants. Johnson & Johnson argues that Benecol should be regulated as a dietary supplement, but the FDA has determined that it is a food and can't be sold until the company proves that stanol ester is safe.

SOY PILLS. A lack of scientific certainty isn't slowing down other efforts. On Nov. 10, the FDA published a proposed rule that would allow foodmakers to make health claims about soy protein's role in reducing the risk of heart disease. It isn't exactly clear how soy protein works, but studies have shown that isoflavone, one of its components, may play a role. So Archer Daniels Midland Co. is now offering soy extract with concentrated isoflavones for use in dietary supplements, and is researching the role isoflavones may play in protecting against prostate cancer.

But ADM's product has its critics. Stephen Barnes, professor of pharmacology and toxicology at the University of Alabama at Birmingham, is concerned that with the soy component available in capsule form, people may skip eating the food and pop pills instead. He warns that consumers may decide on their own to take well in excess of recommended doses. "We don't know what the heck will happen at that point," he says.

Functional-food makers, though, are not letting such concerns slow them down. Next up will be genetically engineered crops, such as a tomato in the works from Zeneca PLC that has high levels of lycopene, which has been linked to a reduced risk of prostate cancer. "This is the way people will eat in the future," claims Tony DeLio, a vice-president with the Uncle Ben's division of Mars Inc. "The key thing for big companies like ours is to get the science right." Looks like the line between food and medicine is getting blurry.

By Amy Barrett in Philadelphia with Joann Muller in Detroit, John Carey in Washington, and David Leonhardt in Omaha

Legal Affairs

ANTITRUST

HAS JUDGE JACKSON MADE UP HIS MIND?

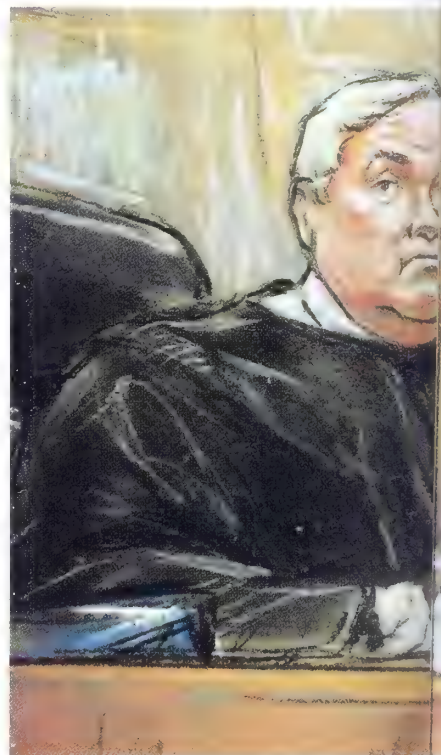
All the courtroom signs point to a ruling against Microsoft

For Microsoft Corp.'s lawyers, it's a familiar pattern: They ask U.S. District Judge Thomas Penfield Jackson for extra time to prepare their defense against the Justice Dept.'s landmark antitrust suit. *Denied.* They try to prevent Justice from expanding the case from a narrow surgical strike into a broad pattern-and-practice action. *Denied.* They beg the judge to stop the trust-busters from showing embarrassing video excerpts of CEO William H. Gates III evading deposition questions. *Denied.*

Eight weeks into the antitrust trial of the century, and evidence that Judge Jackson doesn't like Microsoft's case continues to mount. He has rejected almost all the company's important procedural motions. He snaps at its lawyers for dragging out their cross-examinations. He shakes his head when Bill Gates squirms and equivocates on videotape and recently complained that Gates "has not been particularly responsive to" questioning.

BIGGER PROBLEM. Based on these signals and on the Judge's written rulings, observers increasingly believe Jackson will hand Microsoft a defeat. The burly, silver-haired, 61-year-old judge "has tipped his hand," says William E. Kovacic, visiting professor of antitrust at George Washington University law school. "The government is going to win at the trial level. It is not clear by how much, but I think this judge is going to find a violation and impose some kind of remedy."

If Kovacic and other antitrust experts are right, that could be a bigger problem for Microsoft than it might at first seem. True, the company would have the right to take any adverse decision to the District of Columbia Circuit Court of Appeals, which in the summer handed the software maker a key victory when it overturned the judge's 1997 injunction against it. But Jackson can still cause plenty of trouble (table). If the conserv-



ative Reagan appointee rules that a new Microsoft is guilty of predatory practices, the company would create a public-relations nightmare—and could result in immediate restrictions on the company's business practices. And while there's no way Jackson to bulletproof his decision, an appeals panel that is ideologically hostile to antitrust enforcement, he has the ability to frame his ruling in ways that make it hard to reverse.

Of course, the case is a long way from over. Microsoft hasn't presented its lineup of witnesses, and it's possible they'll be able to torpedo some key claims. Moreover, reading justice leaves isn't an exact science. "Sometimes, judges make you think you've got them on your side when they haven't," cautions New York antitrust litigator Stephen Axinn. But at this point, it's hard to believe Microsoft can escape without some punishment.

company has clashed with the from the very beginning (Mitt, Jackson, and the Justice Dept. declined to comment for this story.) After Justice sued the company in November 1997, for violating the terms of a 1995 consent decree, Microsoft blocked the judge from appointing Harvard Law School professor Lawrence Lessig as a trial consultant. In January, Jackson threatened to hold the company in contempt. After ordered Microsoft to separate itself from its Windows operating system, company lawyers insisted this was technologically impossible—a claim Jackson accomplished himself, in

Microsoft. By definition, judges should never display any partiality, says Hillard M. Sterling, a Chicago antitrust litigator. "Very little is gained by open displays of skepticism. Judge Jackson's demeanor borders on the unprofessional," Sterling says. Others criticize Jackson for appearing at times to fall asleep during the proceedings and for displaying a surprising lack of business knowledge. When Microsoft cross-examined Netscape Communications Corp. CEO James L. Barksdale about statements the company made to stock analysts, the judge interrupted the proceedings to say he was confused. "The problem is I don't know what an analyst is or does," he said.

THE POWER OF THE BENCH

The betting is that Judge Thomas Penfield Jackson will rule against Microsoft. The company is certain to appeal, but Jackson still could inflict some pain. Here's how:

PUBLIC RELATIONS An official judicial finding that Microsoft is guilty of predatory conduct would lend immense credibility to the company's critics.

REMEDIES Jackson could immediately restrict some of Microsoft's questionable business practices, such as demanding exclusive deals from business partners—though the company would quickly appeal any remedies.

PRIVATE SUITS Companies pursuing private antitrust suits against Microsoft could use Jackson's factual and legal findings against the company.

SETTLEMENT POSTURE It could take several months for an appeals court to review Jackson's decision. The government would have an edge in any settlement discussions before then.

DATA BUSINESS WEEK

With a few clicks of his mouse, when the relationship between Microsoft and its trial team has been somewhat. But although the judge is now friendlier to Microsoft's case, he doesn't appear to be any more sympathetic to their case. When asked Apple Computer Inc. Vice President Avadis Tevanian a series of questions on Nov. 5 about whether integrating the Internet browser into an operating system provided technological benefits, he asked the questions "in a way that justice could have scripted," says a Microsoft spokesman. Jackson's legal reasoning echoes the government's. His November 1997, preliminary injunction was seen to be a reading of everyone's government's favor," says William E. Glavin, an antitrust professor at Case Western Reserve University. Antitrust experts believe Jackson may be more to hide his feelings about

Despite these gripes, many lawyers give Jackson credit for pushing the trial along so swiftly. Hoping to prevent a repeat of the decade-long IBM antitrust debacle, Jackson has run the fastest monopolization trial in history. That's likely to encourage trustbusters—who have been so terrified by "the legacy of the IBM case" that they have failed "to bring even good cases"—to be more aggressive in the future, says New York University antitrust professor Eleanor Fox.

Although Microsoft often complains that it isn't getting enough time to defend itself, the quick pace could end up working in its favor. How? If it loses in Jackson's court, company lawyers will be able to argue that the decision should be reversed on the grounds that the accelerated schedule deprived them of enough time to respond to allegations.

What's more, Microsoft's attorneys would be sure to raise a slew of legal,

economic, and factual objections to an adverse opinion. Among other things, they're likely to argue that integration is good for consumers, that the cost of computing is declining, and that the law bars judges from second-guessing high-tech product design decisions. Already, Microsoft has shown its willingness to anger Jackson, if need be, to introduce these points into the trial record.

"ALREADY LOST." In fact, some observers take this indifference to Jackson's ire as a sign that the company has written off the trial judge and started focusing on the higher courts. Most litigants generally avoid alienating the trial judge who first hears a case and are careful not to slow down the proceeding by entering every shred of evidence that supports their position—even if it might improve the chances of a successful appeal.

Not Microsoft. Early on the third day of the company's cross-examination of government economist Frederick R. Warren-Boulton, for example, Jackson became impatient with the snail's pace of the questioning—and later barked at lawyer Michael Lacovara to speed it up. But the defense prolonged the process for another day and a half. "Microsoft has already lost this judge. It's playing to the higher courts," says Sterling.

But if Jackson rules against Microsoft, he can do so in ways that would make it harder for the appeals court to overturn his ruling. First, he can base his decision on the credibility of witnesses, taking into account factors such as their facial expressions and tone of voice. Because appellate judges are not in the courtroom, they are only allowed to reverse Jackson on these grounds

if his determinations are "clearly erroneous"—a daunting legal standard.

Second, Jackson can push "this case into the mold of other decisions where the Supreme Court has found against monopolists," says Axinn. This would make it harder for the appeals court to reverse him than if Jackson found against Microsoft on the basis of innovative, untested legal theories of his own.

That may come as a surprise to many of Microsoft's investors. In recent weeks, the company has been assuring them that it will be able to circumvent any adverse ruling when it takes the case to the friendly D.C. Court of Appeals—a PR campaign that has helped drive its share price up 27% since the trial began, to 131 $\frac{1}{2}$ on Dec. 8. But if the company loses in Jackson's courtroom, it could sting a lot more than the company lets on.

By Mike France in New York, with Susan Garland in Washington



The Best Pro

HOT GAME

Glorious television pictures. Portable phones that operate anywhere in the world. Artificial skin for treating patients suffering from leg ulcers. Whether it's Pfizer's impotence pill Viagra or Nintendo's video game smash The Legend of Zelda: Ocarina of Time, the two dozen entries on BUSINESS WEEK's 1998 Best Products list share creativity and pizzazz. Be they lightweight computers, clever toys, or medical marvels, the products



TWIN SPIN

◁ Now you can put together your favorite tunes on a compact disk. The \$649 dual-deck Philips Audio CD-Recorder CDR765 lets you place a prerecorded CD in one tray, a blank 74-minute CD-recordable disk in the other, and press a button to start recording. You can duplicate a single CD in half the time it takes to play it.

(800) 331-0029

FUR FROM THE MADDING CROWD

▽ Nobody enjoys getting dragged through crowded stores by a kid hell-bent on owning the latest hot toy. But if you nab Tiger Electronics' gremlin-like Furby, expect hours of weird amusement. Furbys talk, giggle, burp, and goof on each other. The dolls are scarce, but you might find one on the Net for five times the \$35 price. (888) 387-2901



DAH DOO-AY!
KAH MAY-MAY
U-NYE!*

FRESH APPLE

▷ The eye-catching design of Apple Computer's iMac is only part of the story. In engineering this \$1,299, all-in-one Macintosh, Apple rethought the personal computer, stripping it down to essentials and coming up with a considerably simpler machine that's ideal for first-time buyers. In the process, Apple caught the public's imagination, created a hit, and revived its own flagging fortunes. (800) 795-1000



Products of 1998

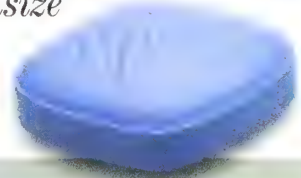
touch every part of our daily lives.

Shave with a triple-bladed razor or

brush your teeth with toothpaste that never quits. Then hit the road in a take-no-prisoners motorcycle or a VW Bug that wraps '60s nostalgia in a '90s package. Better yet, let someone else take the wheel while you read an electronic book, watch a movie on a portable DVD player, shoot video pictures with a palmsize camcorder, or take notes on an electronic message pad.

Special Report

HOT PILL



SAW AWAY

△ Violinists who want to practice without disturbing the neighbors will appreciate Yamaha's Silent Electric Violin. Yamaha replaced the internal amplification cavity of a wood violin with a battery-powered processor. You listen to yourself on headphones; just hit the "reverb" switch to make it sound as if you're playing Carnegie Hall. To perform a duet with Isaac Stern, connect the \$695 SV-100K to a CD player. (616) 940-4900

**KAH
MAY-MAY
U-NYE!**



The Best Products of 1998

HIGH-DEF JAM

▷ High-definition TV broadcasts began on schedule in November. The format is wowing the minuscule percentage of viewers lucky enough to get near a \$7,000-and-up HDTV set from Panasonic, Mitsubishi, Sony, Toshiba, and others. But don't expect HDTV to work with your cable system. Consumer Electronics Mfg. Assn.: (703) 907-7600



JOT MATRIX

◁ You write; it remembers. The \$399 CrossPad from A. T. Cross picks up radio signals from a special pen as you write or draw on paper and generates a digital image. IBM software lets you transfer scribbles to a PC. It uses handwriting recognition to index keywords in written documents.

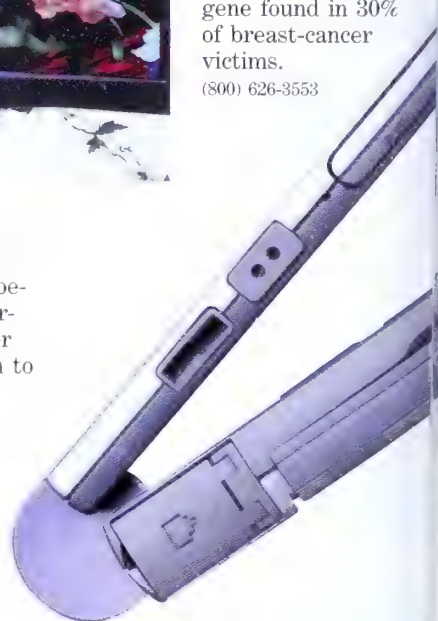
(800) 282-7677



CANCER BLOCKER

△ Genentech's Herceptin is the first drug to target a cancer-causing genetic defect. It blocks a gene found in 30% of breast-cancer victims.

(800) 626-3553



PEERLESS PLOWMAN

◁ Tractors don't usually make you think of video games—until you board the Case MX Series Maxum. A touchscreen controller and satellite technology make it easy to navigate precisely through a field and adjust plowing and planting on the go. The tractors, from \$86,200 to \$142,000, are as easy to drive as the smoothest Japanese sedan.

(800) 501-5711



LOVABLE LAPTOP

◁ It's one of the sexiest computers on the market. Plus, the Sony Vaio 505 sets a new standard in laptop computer portability. Although it's under three pounds and less than an inch thick, this minimarvel sports a 10.4-inch display and—your fingers will be happy—a nearly full-size keyboard. The latest version, the \$2,000 505FX, features a 266-MHz Pentium processor, 32 Mb RAM, and a 4-Gb hard drive.

1-7669

TIGH HIKER

Sandia Peak 5 hiking women, in to 11, that vell as ella's glass Seattle unufacturer l created a it accommo- wer calf, fits a nar- l, and is ght.

598



ONE-INCH BOOKSHELF

◁ Readers who download titles from the Net onto compact electronic books can search and annotate text with a stylus. Cyber booksellers such as barnesandnoble.com sell titles at 20% off retail. As with most things digital, prices for the \$600 SoftBook and \$499 NuvoMedia Rocket eBook should fall.

SoftBook: (800) 222-5861

Levenger (for eBook):
(800) 544-0880



IT FOLLOWED ME HOME...

△ Many LEGO toys move, but the MindStorms Robotics Invention System is something else. The product of LEGO's ties to MIT, it lets kids design robots that can follow a trail and avoid obstacles. The \$200 system uses a microcomputer that can be programmed by attaching it to a PC.

(800) 453-4652

NO PLACE TO HIDE

▽ Several mobile phones let callers reach you around the globe by dialing a single number. Germany's Bosch introduced a \$300 World 718 phone that works in the U.S. and 39 countries. Motorola has unveiled a \$3,000 Iridium satellite phone that operates anywhere in the world.

Bosch:

(800) 371-8637

Motorola:

(888) IRIDIUM

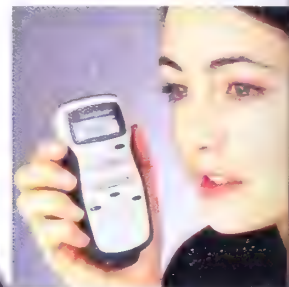


The Best Products of 1998



VROOM! VROOM!

◁ Lightweight meets awesome power. Yamaha's YZF1000R1 weighs just 390 pounds, but its four-cylinder, 150-hp engine gets you $\frac{1}{4}$ mile in 10.1 seconds. The R1 costs \$10,199 and is best suited for experienced riders. (800) 889-2624



GREAT DICTATOR

◁ Dragon Systems' \$299 NaturallySpeaking Mobile package lets you dictate up to 40 minutes of notes into a digital recorder, connect to a PC, and have speech-recognition software convert your words into text. You have to fix spelling and make other corrections. (800) 4 DRAGON



LIVING SKIN BY THE YARD

◁ A new era in regenerative medicine has arrived: the first off-the-shelf human tissue. Apligraf is living skin for patients with leg ulcers. Its maker, Organogenesis, turns infant foreskin cells into acres of skin that can be cut to fit and grafted onto any patient. (781) 575-0775

LEAPING LEXUS

▽ Toyota's Lexus division came up with a refined alternative to trucklike sport-utility vehicles: the high-styled RX 300. It boasts all the amenities and the handling of a luxury car, and a \$32,000 price tag. A big hit, it's now the best-selling vehicle in the luxury carmaker's line. (800) 255-3987



THE BEST WEB SITES

■ **COMPARENET** (www.compare.net) Wondering what kind of digital camera or fridge to buy? You can check out full product descriptions, reviews, and comparisons on 90,000 products.

■ **EBAY** (www.ebay.com) A person-to-person auction site, it lets you sell or bid on everything from antiques to toys. Now you can clean out your garage—and fill it back up again.

■ **E*TRADE** (www.etrade.com) This relaunched investing area offers real-time stock quotes, analysts' reports, free E-mail, and stock-market games. You can even chat with the likes of Intel Chairman Andrew S. Grove.



Imagine Radio

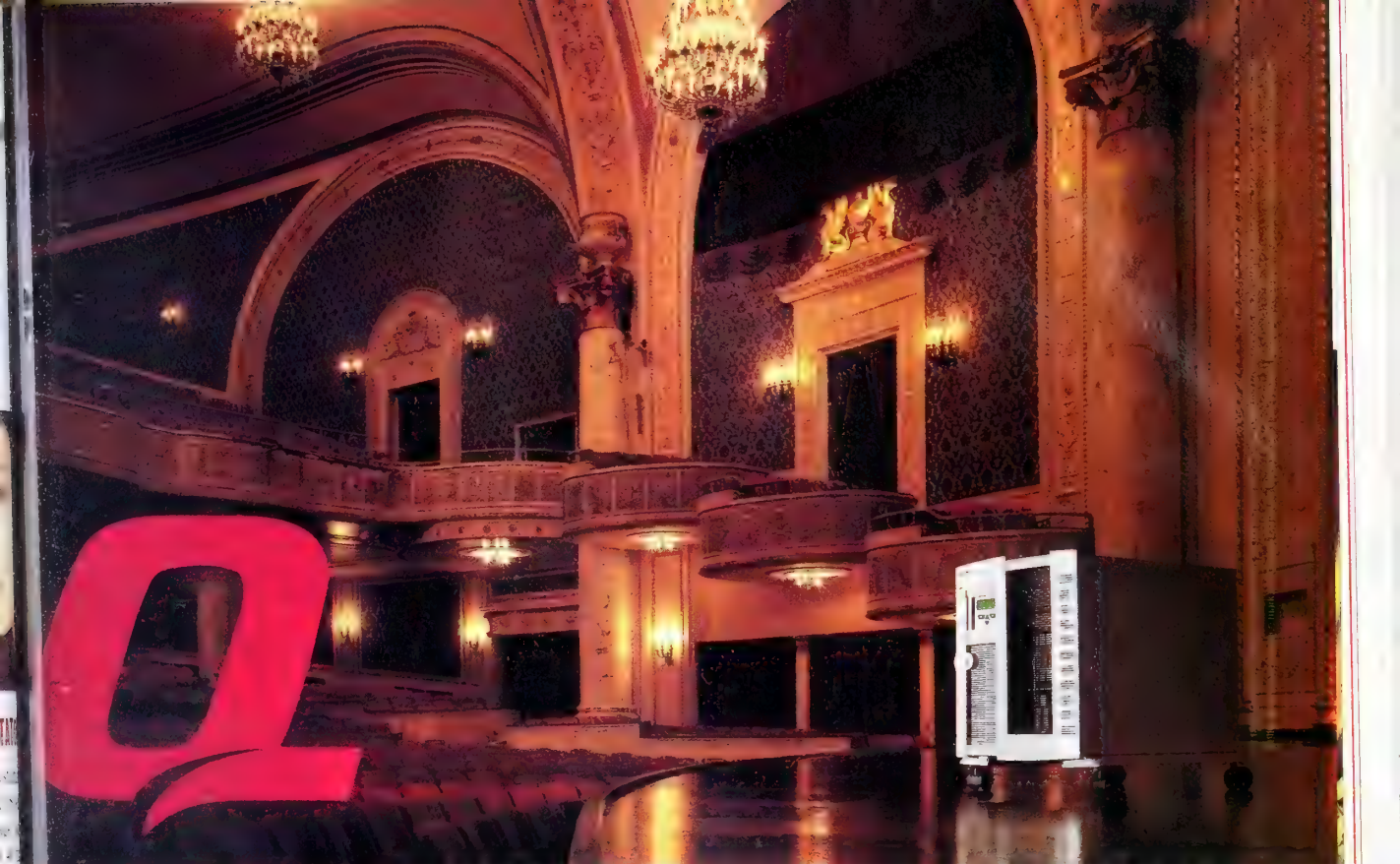
■ **IMAGINE RADIO** (imagine-radio.com) Closet disk jockeys can choose from among hundreds of musical artists to set up their own customized "radio" station.

■ **SAPIENT HEALTH NETWORK** (www.shn.net) Suppliers of more than 20 diseases, from asthma to diabetes to prostate cancer,

can find reams of information targeted to their particular condition.

■ **THE ONION** (theonion.com) This faux news service brings you humorous stories such as "Hostess May Have Marketed Unhealthy Twinkies to Minors."

■ **WIRELESS DIMENSION** (www.wireless-dimension.com) Research and compare cellular-phone deals in your area.



Is it possible to
give the
performance
of a lifetime
every single day?

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rehearsals. Which is why you need a server
that delivers an unforgettable performance
daily. Designed with our Highly Parallel
Systems Architecture and dual Pentium II

processors, the new Compaq ProLiant 3000 has all the power you
need. And the unmatched availability to handle today's demanding
departmental applications. To see how it outperforms
the competition and performs under budget, contact
www.compaq.com/servers/performance or 1-800-AT-COMPAQ.



COMPAQ Better answers.™

The Best Products of 1998



BRUSH HOUR

◁ Total is eating up the competition. The "first obsessive-compulsive toothpaste," as Colgate-Palmolive calls it, has an antibacterial agent that works between brushings.

(800) 763-0246



A BUG'S (SECOND) LIFE

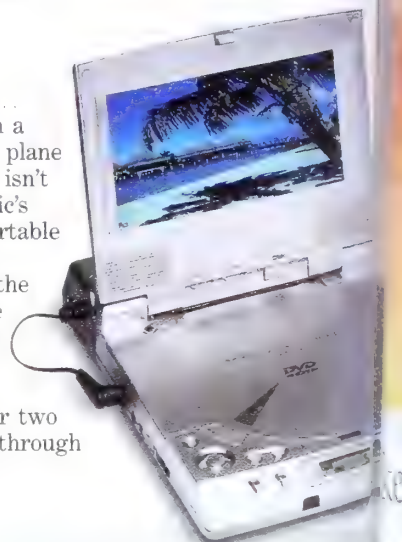
△ After a 20-year absence from the U.S., Volkswagen reintroduced the Bug, reinterpreted to blend nostalgia with the hectic here-and-now. The \$16,425 Beetle retains its cute bubble shape—but now has a heater that actually works.

(800) DRIVE VW

PLANE VIEW

▷ Now you can watch a full-length movie on a plane even when the airline isn't showing one. Panasonic's DVD-L10 is the first portable gizmo to play digital videodisks. You view the film on a 5.8-inch-wide LCD display and listen through headphones. Batteries inside the \$1,300 unit will run for two hours, enough to last through most Hollywood hits.

(800) 211-PANA



YOU LOOK REAL SHARP

◁ Gillette spent some \$1 billion developing and marketing its new triple-bladed razor, Mach3. While the \$1.60 cartridge made critics gasp, consumers loved the gee-whiz technology, including the thinnest blade edge ever. After five months, blade and razor are No. 1 sellers.

(800) GILLETTE



PRODUCTS TO WATCH



GROOVY RUVI

△ Remember when carrying a camcorder felt like hauling luggage? Those days are history. The \$799 Sony Ruvi is about as big as a compact point-and-shoot camera. It stores up to a half-hour of video and sound or up to 350 still images, each accompanied by audio.

(800) 222-7669

■ After getting trounced by Sony and Nintendo, Sega is trying to bounce back with **DREAMCAST**, a next-generation video game console. Just now premiering in Japan, Dreamcast will make its American debut next fall.

■ Isuzu's \$30,000 **VEHICROSS** sport-utility vehicle, due in March, is small by SUV standards and sports two doors. But the Japanese truckmaker hopes the unusual design will give it an edge.

■ Laptop, palmtop, and now wrist-top: The 16-bit **RUPUTER** wristwatch computer, from Japan's Seiko Instruments, weighs only



Dreamcast: U.S.-bound

2.3 ounces and can download text and images from a PC. ■ The \$200, cigarette-box-sized Diamond Multimedia Systems' **RIO PMP300** lets you download up to 60 minutes of music off the Net and replay it with near CD-quality sound.

■ PepsiCo is putting a \$100 million marketing drive behind **PEPSI ONE**, a one-calorie drink targeted at young men. ■ **DIGITAL SUBSCRIBER LINES**, provided by a growing number of phone companies, can get you on the Net up to 140 times faster than a 56-kbps modem.

■ Eastman Kodak's **YOU'VE GOT PICTURES** simplifies viewing photos on the Web. You drop off film at a drugstore, indicate your America Online screen name, and pictures will be sent to your mailbox in 48 hours.



ou set the goal...
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Our Media
Communication
Online



RETAIL

WELCOME TO YUPPIE HARDWARE

Restoration's formula draws upscale buyers in droves



WARM LIGHT, SOFT JAZZ: "We're working from our own intuition," says the CEO

One of the hottest stores of the season doesn't sell slinky skirts or diamond earrings or even computer-powered Furbys. It sells stuff like drawer pulls and shower rings.

Restoration Hardware Inc.'s eclectically stocked home-furnishings stores are packing in holiday shoppers. The chain turned in an 11% same-store sales hike in the third quarter, and analysts predict double-digit gains for the holiday quarter—far beyond the 5% expected for the average retailer. Restoration's high-concept hardware—without the paint thinner and power tools—cannily plays off the childhood memories of nesting baby boomers. Based in Corte Madera, Calif., it sells everything from mission-style furniture to nostalgic knickknacks and even a few hammers and wrenches.

And it does so without cut-rate pricing. In a holiday retailing season dominated by discounting, Restoration is moving Swedish Formula

Hardwood Floor Cleaner, Atomic Robot Man toys, and chenille throws at healthy markups. "There's a lot of neat stuff," said Melissa Johnson, 37, recently at a Seattle store. "It reminds me of a live version of the J. Peterman catalog."

Indeed, if *Seinfeld* were still on the air, Elaine might work there. Like Peterman, Restoration relies heavily on evocative, heartfelt prose to move merchandise. Almost every item is accompanied by an index-card essay—most penned by founder, CEO, and chief copywriter Stephen J. Gordon, 47. "I spend about 10% of my job writing," he says. The essays are often intensely nostalgic. For a set of salt cellars, Gordon recalls childhood memories of family dinners. For others, he pokes gentle fun at the self-congratulatory tastes



PENGUIN SHAKER Nickel-plated martini shaker modeled on a 1936 original, \$48. Set of four matching cocktail glasses, \$12

of yuppies. "Remember when we oh-so Continental?" he wrote for a say on Chianti candles.

Along with elegant displays and jazz, the write-ups are a critical sales element in the stores' play for upper-middle-class boomers, like Gordon himself, with homes to detail and money to spend. A full 95% of Restoration's customers are college-educated, notes Gordon. "The crux of what we do is selling things that are pleasing to the eye," he says. "We're not out trying to pulse. We're working from our own intuition."

Gordon is convinced that that sixth sense can take him nationwide. Armed with \$63 million from an initial public offering last June, Restoration

SALT CELLARS

Tired of the Santa shake? These tiny cut-glass salt cellars come with spoons. \$12 a pair, including a velvet storage bag

is attempting an aggressive national expansion. It has opened 25 locations this year alone, for a total of 65, including a recent, two-story flagship store in New York. Analysts predict that those new stores will help Restoration double last year's sales of \$97 million. The shares, meanwhile, have climbed from \$19 at the IPO to a recent \$45. "UNIQUE." Gordon has been refining the retail concept for almost 20 years. He opened his first store in 1979 in Berkeley, Calif., after renovating a Victorian house and finding that almost no one sells authentic-looking fixtures. About 10% of each store is devoted to hardware—drawer handles to towel racks. More than 800 kinds of cabinet pulls are stocked, in colored glass, brass, pewter, and brass in shapes ranging from simple knobs to chrome teardrops. "A hardware store will maybe have a really unique item," says David Chernoff, 41, at the Manhattan store last weekend. "This place has 200."

What's more, while Chernoff browsed through the hardware, his wife, Deborah, filled a shopping basket with vintage-style tin toys. "Memory-provoking stocking stuffers," she says. F

"Black & Decker is honored to have been recognized by *Business Week* magazine and IDSA for our achievements in product design. Our rich history of innovative new ideas and user-centered design is made all the more rewarding through our participation in the annual IDEA competition."

—Nolan Archibald, Chair, President and Chief Executive Officer, The Black & Decker Corp.

GOOD

"Winning Industrial Design Excellence Awards affirms our ongoing commitment to product design excellence. Design excellence is central to Microsoft's objective of making personal computers more easy, enjoyable, and accessible for all its hardware products."

—Rick Thompson, Vice President, Hardware Group, Microsoft Corp.

DESIGN

"The growing awareness of 'IDEA' has been enhanced by the dedicated support of *Business Week* magazine. This has facilitated new sharing practices among design leaders that have, in turn, created a strong bond between professional design and business leadership."

—John E. Herlitz, Vice President of Product Design, Chrysler Corp.

PAYS

"Great design, useful innovation, and 'retail shelf space presence' form the essential foundation of every new home computer Compaq delivers. Without a focus on world-class design leadership, Compaq could not have achieved the tremendous consumer preference we now enjoy."

—Rod Schrock, Sr. Vice President & General Manager, Consumer Products Group, Compaq Computer Corp.

OFF

Volvo, Sassy Toys, Sunbeam, Samsung, Hewlett-Packard, Sun Microsystems, Motorola, Nike and Chrysler. These companies, all 1998 IDEA winners, show that good design pays off. It pays off in lower costs, higher profits, greater customer satisfaction and new product innovation. Business Week is again proud to sponsor the Industrial Design Excellence Awards (IDEA) annual competition conducted by the Industrial Designers Society of America (IDSA). The IDEA is accepting entries from Asia, Europe, Latin America, Canada and other foreign

countries for products sold in North America. Business Week will publish a major story on the winners in a June, 1999 issue. Designs of business and medical equipment, consumer products, graphic and multimedia, heavy machinery, transportation, packaging, exhibits and furniture are eligible. The deadline for entry is February 15, 1999. For entry information, procedures and fees contact: IDSA, 1142 Walker Road, Great Falls, Virginia 22066. Telephone: (703) 759-0100. Fax: (703) 759-7679. E-mail: idsa@erols.com. Web: www.idsa.org.

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tion's cross-gender appeal is part of its success. About 30% of sales are to men—high for a housewares shop. “The other stores are focused on tabletop or kitchen. That’s not as appealing to men,” says Dave Ricci, an analyst at Chicago brokerage William Blair & Co. “Restoration Hardware combines tabletop with nickel-plated hammers.”

Restoration has attracted more than shopper admiration. Millard S. Drexler, president and CEO of Gap Inc., became a fan about a year ago and joined the board just after the company went public. Even direct competitors are embracing the newcomer. Crate & Barrel and Pottery Barn often elect to locate next to a Restoration Hardware, to create a home-furnishings destination spot in a mall or downtown shopping district. “Their customer is our customer. Their mix of products is exciting, and the displays are great,” says Bette Kahn, spokeswoman for Crate & Barrel.

PRICE WALL? Still, some experts dismiss the chain as a pricey fad and doubt that it can maintain its momentum. Retail consultant Kurt Barnard, publisher of *Retail Trend Report*, notes that the prices for hardware are high and says a savvy consumer will quickly sniff that out. “I purchased brass knobs for my home for under \$2. They’re over \$5 at Restoration Hardware,” he says. Marvin J. Girouard, CEO of Pier 1 Imports, agrees. “Going forward, it could be a little tougher,” he says. “There’s a price where people won’t pay for novelty.”

The chain also runs the risk of damaging its mystique by overexpansion. It plans to add 30 more locations next year. Restoration’s direct-mail pieces and text-heavy ads in upscale magazines help reinforce a sense that consumers are stumbling onto something unique. But that sense could fade if shoppers find an outlet in every suburban mall.

Gordon thinks he can take his chain to 200 stores and maintain its uniqueness.

He is still personally involved in picking merchandise. “Really, nothing goes into the stores I haven’t touched,” he says. And he has no intention of jobbing out his essayist chores, either. “Writing is the best way I’ve found to communicate my vision, my philosophy,” he says. And sell ring-pull drawer handles for \$6 a pop.

By Ellen Neuborne in New York, with Seanna Browder in Seattle and Stephanie Anderson Forest in Dallas



RETRO TIN TOY:

Recalling the flying-saucer toys of the '50s and '60s, YIKES! has retractable landing gear, \$12

The Corporation

NEW PRODUCTS

FORD'S GREEN DILEMMA

Its new sport-ute promises big profits—but guzzles gas



When the Sierra Club caught wind of Ford Motor Co.'s plans for a king-of-the-road sport-ute, it asked its members to give the new model an appropriate name. At 19 feet long and weighing nearly three tons, the hulking new Ford will be the biggest passenger vehicle on the road when it rolls out next fall. And it is expected to burn up a gallon of gas every 12 miles. So the Sierra Club's members couldn't resist dubbing the vehicle the “Ford Valdez” and offering this ad slogan: “Have you driven a tanker lately?”

Ford, not surprisingly, spurned the environmentalists' marketing tips and came up with its own name: the Ford Excursion. But the criticism starkly points up a problem facing the auto maker. Incoming Chairman William Clay Ford Jr. has pledged that when he takes the wheel on Jan. 1, going green will be Ford's new Job 1. However, its success doesn't exactly flow from nature. Ford's outsized profits mostly reflect its dominance in selling the high-margin—and gas-thirsty—sport-utility vehicles that environmentalists love to hate.

But don't look for the awkward conflict between Ford's environmental policy and its bottom-line reality to be spotlighted at the glitzy Detroit auto show

“A GREAT BUSINESS PLAN”

At up to \$50,000 for an Excursion, Ford can rake in money in a hurry

next month. Ford will showcase cars such as the edgy Focus subcompact and a retro-redesign of the Thunderbird. But Ford's biggest model, the Excursion, won't be on display. Although executives are confident their new SUV will sell out, they fear its imposing presence could overshadow the environmentally friendly image they want to project. “The Excursion is the thing you want to roll out without pets and brass bands,” says one Ford executive. **SAFETY FEARS.** For now, the Excursion is just a target for those fret about Americans' growing dependence on big SUVs. Those vehicles guzzle more gasoline, which pumps out more carbon dioxide, a greenhouse gas believed to be a leading cause of global warming. And at 230 inches, the Excursion is 10 inches longer than Chevrolet's Suburban, currently the largest passenger vehicle on the road. It will dwarf big SUVs such as the Chevrolet GMC Yukon, and Dodge Durango. Safety advocates worried that

-tall Excursion will be particularly when it slams into much vehicles in traffic accidents. Excursion will also stand out in way: It will be exempt from regulations aimed at curbing zlers. The nine-passenger model rge it won't even be classified ight vehicle"—a category that y includes SUVs, pickups, and s. That means it will avoid fed- l economy standards requiring maker's light trucks to average les per gallon. Ford, therefore, ave to worry about the Excur- gging down its fleet average.

American car buyers snapping and paying historic low gas environmentalists have had persuading Congress to put mileage standards on light So now they're counting on ng Henry Ford's 41-year- t-grandson. When he was chairman in September, as quick to highlight his The environment will be e quality," he said. "It's a ough which we will look e make product decisions." nentalists plan to keep him rd. "In order for Bill Ford s environmental vision into " says Daniel Becker, a dif- f the Sierra Club, "he'll move Ford away from the -guzzling vehicles they're making."

FATHER. That would be o auto maker in the world es: much from sport-utilities Last year, it banked \$5 a pretax earnings from .5% of its total. And SUVs for nearly one-fifth of tal vehicle sales, up from eade ago. Indeed, Wall edicts the Excursion will er smash hit for the com- t leads the sport-utility 27% of the U.S. market. as won over SUV drivers

engine power, car-like drive- nd luxury amenities such as eats. The Excursion, with an price tag of up to \$50,000 and -10 engine, will appeal in par- those with a boat or horse lug. Analysts say pretax prof- ach Excursion could reach topping a record margin of enerated by Ford's \$45,000 Navigator. In part that's be- SUV's development costs were r \$1 billion by building it on g super-duty pickup frame. If 0 Excursions are sold annual- pay off in the billions. "This is usiness plan," gushes analyst

Maryann N. Keller of Furman Selz.

Ford, an avid fly fisherman who sits on the board of environmental advocacy group Conservation International, doesn't see his green goals as being incompatible with roaring SUV sales. "It's a delicate balance between what the customer wants and being completely environ- mentally driven," he says. And having blinders on is a recipe for disaster, he contends: "You can make a completely clean vehicle, but if it sits unsold on the dealer's lot it's not helping the environ- ment, either. We just have to make these vehicles cleaner and cleaner every year."

Ford did just that this year, outfitting its SUVs with beefier catalytic convert-

they contend that the auto maker's SUVs are nowhere near as green as its cars. "The biggest single step we can take to curb global warming would be to use less gas," says the Sierra Club's Becker.

RAGING DEBATE. The Excursion might never have hit the road, some company insiders say, had Bill Ford been in charge when its development was approved in 1996. Ford waves off such speculation, but company insiders say there was a raging debate over the Excursion. Initially, planners intended the behemoth to be a bare-bones SUV sold only to commercial fleets. But when the Ford Expedition became a runaway hit—signaling that the market for large SUVs was growing faster than expected—executives gave the green light to make the Excursion an upscale rival to Chevrolet's Suburban. "At first, a lot of people worried that it would be politically incorrect," says an insider. "But when they saw the profits coming from the Expedition, that made the decision easy."

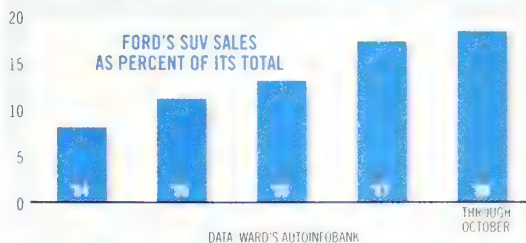
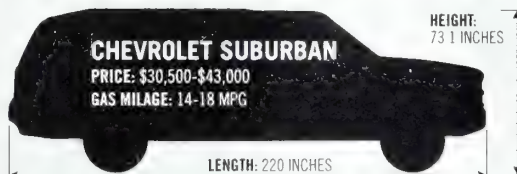
Indeed, Ford is struggling to keep up with insatiable SUV demand. Its SUV sales are up 12% this year and are expected to top 700,000 vehicles for the first time. Customers are waiting 12 weeks for delivery of a Navigator at Steve Kalafer's Lincoln Mercury dealership in Flemington, N.J. He predicts the Excursion will be a sellout, too. "There is a ready market of bigger-is-better SUV buyers," explains Kalafer.

Bigger also means fatter profits. Ford's success with sport-utilities and pickup trucks gives it a \$1,100 earnings-per-vehicle edge over General Motors, making Ford the world's most profitable auto maker, says Merrill Lynch & Co. analyst Nicholas Lobaccaro. That's a key reason Ford's stock is up 71% this year, to around 55. "Sport-utilities have been a huge part of the market and they have very good products," says investor Seth M. Glickenhau, who doubled his Ford holdings this year to 2.2 million shares.

But when the curtains pull back on Ford's new lineup at the Detroit show, the Excursion will be conspicuous by its absence. Despite the auto maker's environmental pronouncements, industry insiders just don't believe the big SUV can be transformed from road warrior into jolly green giant. "There's absolutely no possible way to make it environmentally friendly," says auto consultant Wesley R. Brown of Nextrend Inc. But that may not matter—when Ford execs look at the profit prospects for the Excursion, they see nothing but green.

By Keith Naughton in Detroit

NEW BEAST ON THE BLOCK



ers, allowing them to spew as little smog as clean-running cars. Ford's high-tech, multivalve truck engines also make it easier to clean up emissions because they burn fuel more efficiently. That puts Ford in a much better position than General Motors Corp. and Daimler-Chrysler to meet tough new pollution standards California is imposing and federal officials are considering. Boasts CEO-designate Jacques A. Nasser: "We've demonstrated that we're on the leading edge of ecology by making our SUVs as clean as our cars."

That's not how environmentalists see it. With the Excursion getting less than half the mileage that Ford cars average,

EDITED BY AMY DUNKIN

DEALING YOURSELF INTO THE IPO GAME

Want to get your hands on the next hot new stock with .com in its name? Unless your broker owes you a big favor, you'll probably have to buy it secondhand after its price has soared. When it comes to initial public offerings, average investors don't stand a chance against professionals, who usually get first crack at hot deals. But you can get into the IPO game another way—through the side door.

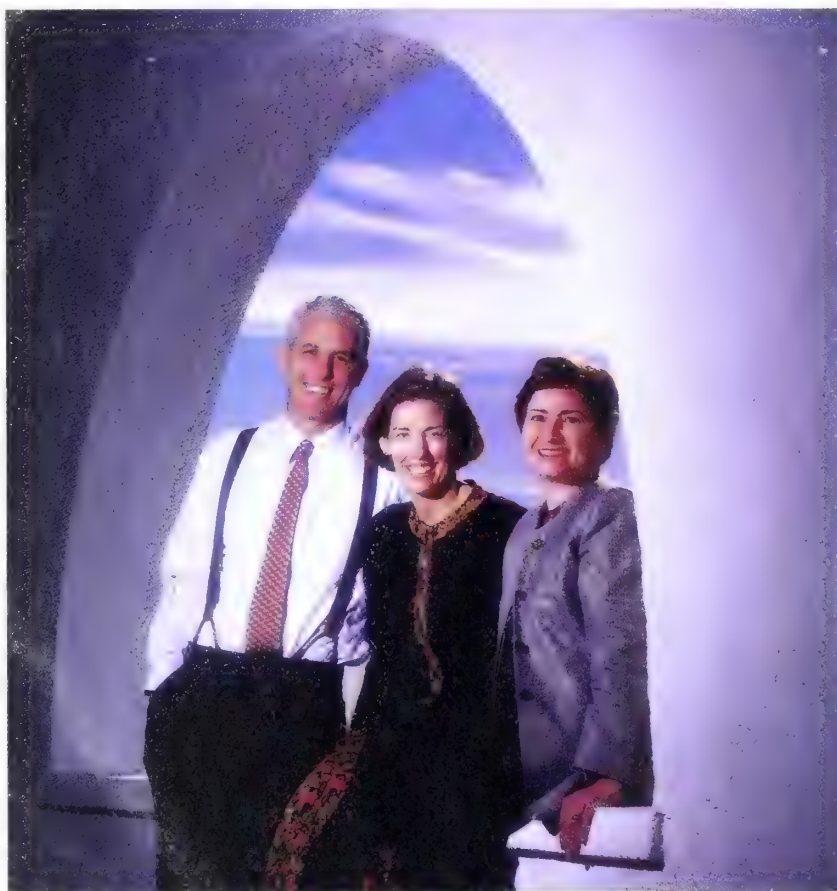
To help the little guy gain access to this clubby corner of the market, Renaissance Capital, a Greenwich (Conn.) research firm specializing in newly minted stocks, launched the first mutual fund to invest mainly in IPOs. "We have always gotten allocations [of IPOs] because we are well-known," says Linda Killian, one of three friends who met at Wharton in the late 1970s and went on to found Renaissance in 1991 and the IPO Plus Aftermarket fund in February.

NO REMORSE. So far, Killian and partners have snapped up shares in 10 online offerings—and they have had no remorse about purging their 20-stock portfolio of highfliers to take profits. Among those to go were sensations eBay, VeriSign, and Inktomi. "When stocks get to what we think are unsustainable valuations, we

sell them," Killian says.

Although that discipline has caused the fund to pass on some other phenomenal IPO successes, including Broadcast.com, the strategy has produced a 3.7% gain through November—not bad, considering that almost 60% of this year's IPOs have dropped below their offering prices, says New York research firm CommScan.

The IPO Plus Aftermarket fund also beat its peers in the small-cap growth category, which is down an average of 5.27% this year, according to Morningstar.



split-adjusted on prices," CommScan says. And when the market slides, they flee first—the illiquid and unpopular IPO stocks.

FIRST-RATE. Nonetheless, as the successes of Yahoo and Amazon.com among some of today's known are household names. When it comes to identifying them, Ritter at Renaissance has the edge. Renaissance Capital "does first-rate research," says. "If I were an investor who did recent IPOs, they seem to be an excellent vehicle."

Killian and her managers, Al Smith and Kathleen Smith, and her husband and wife are picky. They bought shares

YOUTH MARKET

Renaissance's William and Kathleen Smith and Linda Killian this year opened the first fund focused on

But is it a good idea to chase after fresh young stocks? Many experts say no. True, the average new issue rises 16% in its first day of trading, says Jay Ritter, a University of Florida finance professor who specializes in IPOs. But most trail the broader market for the remainder of the year, says Standard & Poor's analyst Mark Basham. Of the 3,477 companies to go public since 1993, about 55% are currently trading at or below their

than 20% of the 343 companies that went public this year. The no-load fee, which requires a \$2,500 minimum investment, concentrates on companies new to public markets, although it sometimes buys older shares in secondary offerings.

To winnow the field, managers discard companies trading at premiums in hot industries. That's straightforward enough when it comes to oil and entertainment prospects, such as

YOUR MONEY
MUTUAL FUNDS

Fox Entertainment which Killian bought on a basis of attractive cash-flow multiples. Without traditional yardsticks such as earnings, Internet companies allenges, says Killian. But for those with sub-business models and itive edges such as

With IPO Plus Stacks Up

It invested heavily in IPOs

| | RETURN* |
|--------------------|---------|
| ET B** | 41.5% |
| MICRO CAP GROWTH | 20.3 |
| ENTERPRISE A | 15.7 |
| ALL CAP R | 10.7 |
| MICRO-CAP EQUITY** | 8.6 |
| MARKET | 3.7 |
| L CAP A | 0.8 |
| FELL MICROCAP | -7.8 |
| DWTH | -9.9 |
| OCAP RETAIL | -12.5 |
| ILEY SMALL CAP | -16.8 |

ed earlier this year
DATA: MORNINGSTAR INC

market share. Those that passed is Santa Monica based GeoCities, online chat rooms de-topics including foot-l investing give ad-s access to highly l audiences, Killian t GeoCities illustrates fund managers are ot to fall in love with tock picks. When s reached the undis-um that Killian and ners figured it was he fund bailed out. nt holdings include Foods, a \$143 million, ncisco-based compa-as breathed new life ds including Duncan Mrs. Butterworth's, este pizza. Although sales are growing an those of the aver-company, its stock t a 20% discount to stry, based on price-ratios, Killian says.

Another favorite is Fox, which sells at a slight discount to its peers despite smash box-office hits, including *Titanic*, and hot television and cable programming. Killian has her eye on a December 10 IPO from radio powerhouse Infinity Broadcasting, currently part of CBS.

The fund also holds positions in Equant, a Dutch data network provider with global reach, and Boston-based American Tower, which operates more than 2,000 towers that broadcast wireless telecom signals throughout the country.

MISGIVINGS. With valuations for all IPOs except Internet stocks falling back to earth, Killian expects the pace and variety of new offerings—currently the slowest since the 1990 recession—to improve. But others aren't so sanguine. Until investors stop favoring the largest, most liquid stocks, the IPO pipeline is likely to remain inhospitable to all but In-

ternet sensations and established companies, Basham says.

Given the risks of IPO underperformance (not to mention the IPO fund's rich current expense ratio of 2.5%), Morningstar analyst Russel Kinnel says "most people are better served by a fund that just buys some IPOs" (table). Nonetheless, the eight funds with established track records that purchased IPOs most aggressively this year—but are not restricted to newly minted stocks—have returned only 0.07% on average, Morningstar says. These results are a far cry from theglobe.com's 600% first day climb—and a sobering reminder of just how hard it can be to make money in IPOs. *Anne Tergesen*

YES, THERE ARE STILL BARGAIN BOND FUNDS

Closed-end bond funds looked very attractive to fixed-income investors

last summer. Many municipal, government, and high-quality corporate funds were trading at discounts of as much as 4.7% from their net asset value (NAV). Then, as the bond rally shifted into high gear, many big discounts disappeared. That was especially true among closed-end municipal funds, where tax-free yields were at record highs vs. those on Treasury bonds. But that doesn't mean all the opportunities have dried up. "There are still funds with good discounts that represent value," says analyst Maria Ketchledge at CDA/Wiesenberg, a financial information firm in Rockville, Md.

Ketchledge especially likes investment-grade corporate funds, such as Van Kampen Bond. It's trading at a 5.3% discount to NAV, with a yield of 6.9%. The intermediate-term Dean Witter Government Income

Trust, meanwhile, has a 6.7% discount and a yield of 6.4% (table).

Unlike open-ended mutual funds, a closed-end fund trades on a stock exchange and may sell for more or less than NAV. A variation on a closed-end bond fund is the closed-end term trust, which matures on a specified date. When that occurs, shareholders get back the fund's NAV. Investment adviser Ron Rogé, president of R.W. Rogé in Bohemia, N.Y., has encouraged clients who piled up big gains in this year's Treasury rally to sell their bonds, put the proceeds into a closed-end bond trust trading at a discount to NAV, and hold it until it matures in five years or so. That way, they can capture the return between the discount and the price at maturity, all the while enjoying the income the trust throws off. Of course, investors must feel confident they can offset the transaction costs and taxes incurred by cashing in their appreciated Treasuries.

If you buy a closed-end bond fund, you'll have to pay commissions on your purchase and any sale. If rates move higher, the market value of these funds will drop, and their liquidity may dry up. But the bond market is sound now—and heaven knows how long closed-end discounts will last. *Chip Norton*

Norton is managing editor of S&P PERSONAL WEALTH (www.personalwealth.com).

Closed-End Values

| FUND OR TERM TRUST | DISCOUNT TO NAV | YTD RETURN* | YIELD |
|---|-----------------|-------------|-------|
| CORPORATE INVESTMENT GRADE | | | |
| 1838 BOND | 6.60% | 9.73% | 7.15% |
| DEBENTURE TRADING (BDF) | | | |
| INTERCAPITAL | 4.02 | 11.88 | 7.26 |
| INCOME SECURITIES (ICB) | | | |
| VAN KAMPEN BOND (VBF) | 5.33 | 2.73 | 6.91 |
| GOVERNMENT | | | |
| BLACKROCK ADVANTAGE | 11.10 | 11.12 | 6.33 |
| TERM TRUST (2005) (BAT) | | | |
| DEAN WITTER GOVT. INCOME TRUST (GVT) | 6.70 | 11.89 | 6.40 |
| BULL & BEAR U.S. GOVT. SECURITIES (BBG) | 6.20 | 14.11 | 8.85 |

*Nov. 27

DATA: CDA/WIESENBERGER

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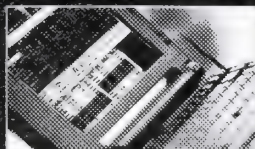
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On Top

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The biennial international team play event will be contested December 1-5 at The Royal Melbourne Golf Club in Victoria.

Under the leadership of Captain Jack Nicklaus, the defending U.S. team will face a stiff challenge from an International team led by Captain Peter Thomson.

Royal Melbourne's Compositon has been regularly rated as one of the top 10 courses.

One of the unique aspects of the Presidents Cup is that players do not receive prize money based on performance. Instead, the net proceeds are divided into equal shares for the players and captains to donate to the worldwide charities.

TUNE IN AT THESE TIMES

All Times Eastern Standard Time

Wednesday, December 1

Preview Show

5:00 - 6:00 PM - ESPN

Thursday, December 2

Opening Ceremony

12:00 MID - 1:00 AM - ESPN

1st Day Foursome

4:00 - 8:30 PM - ESPN

1st Day Four-Ball

9:30 PM - 2:00 AM - ESPN

Friday, December 3

2nd Day Foursome

4:00 - 8:30 PM - ESPN

Saturday, December 4

2nd Day Four-Ball

1:00 - 6:00 PM - CBS

Sunday, December 5

3rd Day Singles

4:00 - 7:00 PM - CBS



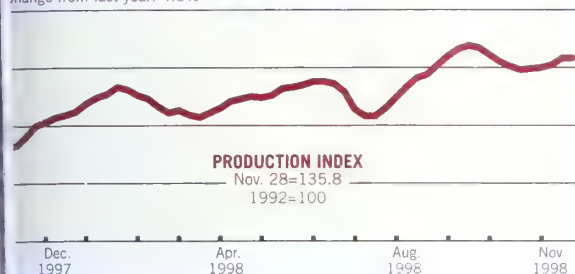
Members of the United States and International Teams are also eligible to compete at the 1999 WORLD GOLF CHAMPIONSHIPS NEC Invitational, August 23 - 29 at the Firestone Country Club in Akron, OH. The NEC Invitational will feature players from the last-named Presidents Cup and Ryder Cup teams. Call (330) 644-2200 for information



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PRODUCTION INDEX

Change from last week: 0.0%
Change from last year: 4.5%



Production index was flat in the week ended Nov. 28. The unaveraged index rose to 135.6, from 137, and the monthly index for November increased 0.7% to 134.9 in October. After seasonal adjustment, raw steel production rose 5.1%, with its capability utilization rate the lowest since June, 1991. Autos, trucks, electricity, lumber, and rail-freight were also down, as was the Thanksgiving holiday. Oil and coal production both posted hefty gains.

Index copyright 1998 by The McGraw-Hill Companies

PRICING INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|------------|--------------|
| PRICES (12/4) S&P 500 | 1176.74 | 1192.29 | 19.6 |
| RATE BOND YIELD, Aaa (12/4) | 6.22% | 6.25% | -9.3 |
| SUPPLY, M2 (11/23) billions | \$4,379.0 | \$4,382.5r | 8.7 |
| CLAIMS, UNEMPLOYMENT (11/27) thous | 313 | 301r | -2.8 |
| AGE APPLICATIONS, PURCHASE (12/4) | 299.6 | 293.8 | 27.1 |
| AGE APPLICATIONS, REFINANCE (12/4) | 2,055.1 | 2,086.3 | 161.8 |

S: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

INTEREST RATES

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|--|-------------|----------|----------|
| FED FUNDS (12/8) | 4.66% | 4.82% | 5.29% |
| DISCOUNT RATE (12/8) 3-month | 5.00 | 5.08 | 5.73 |
| LIBOR (12/9) 3-month | 5.12 | 5.19 | 5.81 |
| FIXED RATE MORTGAGE (12/4) 30-year | 6.89 | 6.93 | 7.35 |
| ADJUSTABLE MORTGAGE (12/4) one-year | 5.74 | 5.71 | 5.72 |
| (12/4) | 7.75 | 7.75 | 8.50 |

Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|----------|--------------|
| STEEL (12/5) thous. of net tons | 1,747 | 1,736# | -19.6 |
| AUTOS (12/5) units | 121,616 | 74,815r# | -8.5 |
| TRUCKS (12/5) units | 153,829 | 88,297r# | 2.0 |
| ELECTRIC POWER (12/5) millions of kilowatt-hrs | 60,029 | 58,753# | -4.7 |
| CRUDE-OIL REFINING (12/5) thous. of bbl./day | 14,377 | 14,337# | -3.2 |
| COAL (11/28) thous. of net tons | 20,500# | 22,043 | 2.9 |
| LUMBER (11/28) millions of ft. | 326.5# | 514.3 | 15.7 |
| RAIL FREIGHT (11/28) billions of ton-miles | 23.9# | 28.4 | 1.3 |

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFP2, Association of American Railroads

PRICES

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|--|-------------|----------|--------------|
| GOLD (12/9) \$/troy oz. | 294.200 | 294.150 | 2.8 |
| STEEL SCRAP (12/8) #1 heavy, \$/ton | 85.50 | 85.50 | -35.0 |
| COPPER (12/4) ¢/lb. | 72.4 | 74.4 | -13.9 |
| ALUMINUM (12/4) ¢/lb | 62.5 | 62.0 | -19.1 |
| COTTON (12/4) strict low middling 1-1/16 in., ¢/lb. | 64.33 | 63.84 | -2.7 |
| OIL (12/8) \$/bbl. | 11.02 | 10.89 | -40.3 |
| CRB FOODSTUFFS (12/8) 1967=100 | 196.95 | 196.86 | -20.5 |
| CRB RAW INDUSTRIALS (12/8) 1967=100 | 266.57 | 267.64 | -14.1 |

Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|---|-------------|----------|----------|
| JAPANESE YEN (12/9) | 117.96 | 120.08 | 128.90 |
| GERMAN MARK (12/9) | 1.67 | 1.67 | 1.78 |
| BRITISH POUND (12/9) | 1.66 | 1.66 | 1.65 |
| FRENCH FRANC (12/9) | 5.60 | 5.61 | 5.97 |
| ITALIAN LIRA (12/9) | 1651.8 | 1656.0 | 1744.5 |
| CANADIAN DOLLAR (12/9) | 1.54 | 1.54 | 1.42 |
| MEXICAN PESO (12/9)* | 9.955 | 9.964 | 8.139 |
| TRADE-WEIGHTED DOLLAR INDEX (12/9) | 106.9 | 107.5 | 109.4 |

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

a in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

CONSUMER PRICE INDEX

Dec. 15, 8:30 a.m. EST ► Consumer prices for all goods and services increased 0.2% in November, says an forecast of economists surveyed by Standard & Poor's MMS, a division of The Hill Companies. Excluding food and energy, core prices also are forecast to ease 0.2%. In October, total and core both rose 0.2%. Low inflation has led the Federal Reserve to ease its monetary policy on protecting the system.

MANUFACTURER'S INVENTORIES

Dec. 15, 8:30 a.m. EST ► Inventories of manufacturers, wholesalers, and

retailers likely grew 0.3% in October, on top of a large 0.6% gain in September. Manufacturers have already reported a 0.6% advance in their November stock levels.

HOUSING STARTS

Wednesday, Dec. 16, 8:30 a.m. EST ► Housing starts probably fell to an annual rate of 1.65 million in November, down slightly from October's 1.7 million pace. Even so, housing appears to be one of the strongest sectors in the economy this quarter.

INDUSTRIAL PRODUCTION

Wednesday, Dec. 16, 9:15 a.m. EST ► Output at mines, factories, and utilities probably fell 0.3% in November, says the S&P

MMS median forecast, on top of a 0.1% dip in October. That's suggested by the drops in factory jobs and average workweek for the month. Consequently, operating rates likely remained at a low 80.6% last month.

INTERNATIONAL TRADE

Thursday, Dec. 17, 8:30 a.m. EST ► The foreign trade deficit for goods and services probably widened to \$15 billion in October, from \$14 billion in September. Exports probably fell back after jumping 2.3% in September, while imports likely rebounded in October from a 0.2% dip in September. Foreign trade subtracted from economic growth in the third quarter.

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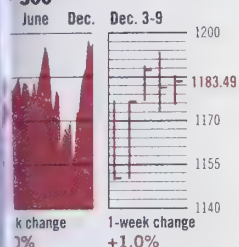
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Investment Figures of the Week

MARKETS

S&P 500



STOCKS

Strong performance of the heavy NASDAQ index was a key news item in the markets this week. While the S&P 500 rose a tepid 1.0% and heavy industrials actually fell, the NASDAQ surged 2.8% to a record high, with such names as Intel and Microsoft posting huge gains. Since the beginning of the year, the index has climbed 30.5%, compared to a 2% gain for the S&P and a 1% gain for the Dow. Bonds also posted some hefty gains, as did the 30-year Treasury, ending the year below 5% for the first time since mid-October.

U.S. MARKETS

| | Latest | % change
Week | % change
Year |
|---------------------------|--------|------------------|------------------|
| Dow Jones Industrials | 9009.2 | -0.6 | 12.9 |
| NASDAQ Combined Composite | 2050.4 | 2.8 | 28.4 |
| S&P MidCap 400 | 359.0 | 1.7 | 9.5 |
| S&P SmallCap 600 | 167.6 | 0.7 | -6.4 |
| S&P SuperComposite 1500 | 249.1 | 1.1 | 19.6 |

SECTORS

| | Latest | % change
Week | % change
Year |
|---------------------------|--------|------------------|------------------|
| Bloomberg Information Age | 444.5 | 4.4 | 50.5 |
| S&P Financials | 126.2 | -1.4 | 6.2 |
| S&P Utilities | 256.0 | 0.6 | 16.1 |
| PSE Technology | 422.5 | 3.2 | 43.0 |

FOREIGN MARKETS

| | Latest | % change
Week | % change
Year |
|-----------------------|----------|------------------|------------------|
| London (FT-SE 100) | 5669.1 | 2.9 | 10.5 |
| Frankfurt (DAX) | 4663.7 | -0.6 | 13.3 |
| Tokyo (NIKKEI 225) | 14,931.9 | -0.4 | -9.4 |
| Hong Kong (Hang Seng) | 10,361.3 | 3.0 | -6.0 |
| Toronto (TSE 300) | 6406.3 | 0.4 | -5.2 |
| Mexico City (IPC) | 3805.5 | -0.3 | -24.6 |

FUNDAMENTALS

| | Latest | Week
ago | Year
ago |
|-----------------------------------|--------|-------------|-------------|
| S&P 500 Dividend Yield | 1.31% | 1.33% | 1.57% |
| S&P 500 P/E Ratio (Last 12 mos.) | 30.6 | 30.1 | 24.6 |
| S&P 500 P/E Ratio (Next 12 mos.)* | 23.0 | 22.8 | 19.3 |
| First Call Earnings Revision* | -1.81% | -4.25% | -1.35% |

TECHNICAL INDICATORS

| | Latest | Week
ago | Reading |
|----------------------------------|--------|-------------|----------|
| S&P 500 200-day average | 1094.2 | 1090.6 | Positive |
| Stocks above 200-day average | 35.0% | 35.0% | Positive |
| Options: Put/call ratio | 0.46 | 0.43 | Negative |
| Insiders: Vickers Sell/buy ratio | 0.71 | 0.63 | Positive |

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS

| | Last
month % | Last 12
months % |
|-------------------------|-----------------|---------------------|
| Transportation Services | 28.7 | 85.9 |
| Semiconductors | 23.3 | 67.7 |
| Instrumentation | 16.1 | 65.4 |
| Communications Equip. | 15.7 | 60.5 |
| Specialty Retailers | 15.6 | 60.2 |

WORST-PERFORMING GROUPS

| | Last
month % | Last 12
months % |
|-------------------------|-----------------|---------------------|
| Oil & Gas Drilling | -25.7 | -64.2 |
| Oil-Well Equip. & Svcs. | -18.9 | -45.9 |
| Toys | -18.0 | -34.7 |
| Gold Mining | -17.3 | -34.2 |
| Oil Exploration & Prod. | -16.9 | -33.5 |

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

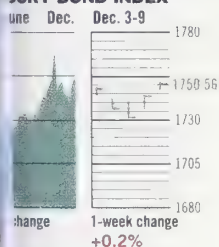
| | Price | 1-month
change |
|------------------|---------|-------------------|
| Telebras-ADR | 85 3/16 | -1 1/16 |
| Amoco | 56 7/16 | -1 5/16 |
| Gateway 2000 | 52 9/16 | -6 11/16 |
| Coca-Cola | 68 3/8 | -2 15/16 |
| Procter & Gamble | 86 3/4 | -1 13/16 |
| McKesson | 70 1/2 | -3 |

Decline ahead? Stocks with most significant selling on price strength

| | Price | 1-month
change |
|------------------|----------|-------------------|
| Cisco Systems | 79 3/16 | 12 13/16 |
| MCI WorldCom | 62 7/8 | 6 7/8 |
| Microsoft | 131 3/16 | 20 1/2 |
| Sun Microsystems | 76 1/8 | 14 7/16 |
| Inktomi | 122 1/8 | 6 3/8 |
| Lycos | 57 7/8 | 6 1/4 |

BOND RATES

SURVEY BOND INDEX



Data: Bloomberg Financial Markets

KEY RATES

| | Latest
week % | Week
ago % | Year
ago % |
|---------------------------|------------------|---------------|---------------|
| MONEY MARKET FUNDS | 4.77 | 4.79 | 5.20 |
| 90-DAY TREASURY BILLS | 4.41 | 4.48 | 5.21 |
| 6-MONTH BANK CDS | 4.37 | 4.40 | 5.21 |
| 1-YEAR TREASURY BILLS | 4.43 | 4.41 | 5.51 |
| 10-YEAR TREASURY NOTES | 4.57 | 4.59 | 5.90 |
| 30-YEAR TREASURY BONDS | 4.98 | 5.03 | 6.10 |
| LONG-TERM AA INDUSTRIALS | 5.95 | 5.96 | 6.63 |
| LONG-TERM BBB INDUSTRIALS | 6.84 | 6.85 | 7.03 |
| LONG-TERM AA TELEPHONES | 6.35 | 6.35 | 7.02 |

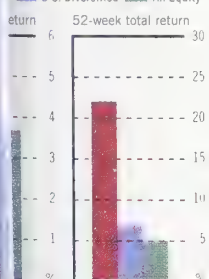
BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

| | 10-yr. bond
Latest
week | 10-yr. bond
Last
week | 30-yr. bond
Latest
week | 30-yr. bond
Last
week |
|-----------------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|
| GENERAL OBLIGATIONS | 4.12% | 4.14% | 4.80% | 4.80% |
| PERCENT OF TREASURIES | 90.16 | 90.24 | 96.34 | 95.62 |
| TAXABLE EQUIVALENT | 5.97 | 6.00 | 6.96 | 6.96 |
| INSURED REVENUE BONDS | 4.23 | 4.26 | 5.01 | 5.03 |
| PERCENT OF TREASURIES | 92.56 | 92.85 | 100.56 | 100.21 |
| TAXABLE EQUIVALENT | 6.13 | 6.17 | 7.26 | 7.29 |

MUTUAL FUNDS

U.S. Diversified All Equity



Data: Morningstar, Inc.

EQUITY FUNDS

| Leaders | | Laggards | |
|-----------------------------|-------|------------------------------|-------|
| Four-week total return | % | Four-week total return | % |
| Matthews Korea I | 31.8 | ProFunds UltraShort OTC Inv. | -23.7 |
| ProFunds UltraOTC Service | 26.3 | Fidelity Sel Energy Serv. | -19.1 |
| Fidelity Select Electronics | 22.1 | Oppenheimer Real Asset B | -18.7 |
| Rydex Electronics Inv. | 21.0 | Rydex Energy Svcs. Inv. | -18.4 |
| Fidelity Select Technology | 19.2 | State St. Res. Glob. Res. B | -17.9 |
| Leaders | | Laggards | |
| 52-week total return | % | 52-week total return | % |
| ProFunds UltraOTC Inv. | 100.0 | Lexington Troika Russia | -82.9 |
| Munder NetNet A | 67.3 | Fidelity Sel Energy Serv. | -53.3 |
| Dreyfus Technology Growth | 62.0 | Eaton Vance Wwde. Dv. Res. B | -51.9 |
| Flag Investors Commun. A | 57.8 | American Heritage | -51.6 |
| Fidelity Select Computers | 56.5 | State St. Res. Glob. Res. B | -51.1 |

EQUITY FUND CATEGORIES

| Leaders | | Laggards | |
|--------------------------|------|----------------------------|-------|
| Four-week total return | % | Four-week total return | % |
| Technology | 13.2 | Precious Metals | -8.7 |
| Communications | 9.3 | Natural Resources | -8.4 |
| Japan | 8.1 | Latin America | -5.2 |
| Diversified Pacific/Asia | 7.3 | Diversified Emerging Mkts. | 0.1 |
| Pacific/Asia ex-Japan | 7.1 | Small-cap Value | 0.5 |
| Leaders | | Laggards | |
| 52-week total return | % | 52-week total return | % |
| Communications | 30.5 | Latin America | -37.1 |
| Technology | 26.9 | Diversified Emerging Mkts. | -29.9 |
| Large-cap Growth | 22.9 | Natural Resources | -28.0 |
| Utilities | 18.7 | Pacific/Asia ex-Japan | -19.7 |
| Large-cap Blend | 15.8 | Real Estate | -14.5 |

of market close Wednesday, Dec. 9, 1998, unless otherwise indicated. Industry S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Dec. 8. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

THE COMING TEST FOR PRODUCTIVITY GAINS

Productivity growth for the U.S. economy in the third quarter rose by 3%. That's a strong showing, especially so late in a business cycle that will enter its 94th month of expansion in January (beating the previous record peacetime expansion, in the 1980s). In fact, productivity growth for the past three years has averaged about 2%, nearly twice the 1% rate of the '70s and '80s. This is an important achievement. It suggests that productivity growth may be returning to its historic trend of 2%, permitting sustained high economic growth, low unemployment, and low inflation well into the next century.

But the numbers are not conclusive. Over the past 30 years, there have been four three-year periods where productivity growth averaged 2% before falling back below that level. Is the 1996-98 period a temporary bump, or the beginning of a sustained era of high productivity growth? We just don't know.

Then there is the problem of measurement. Recent revisions by the Bureau of Labor Statistics changed the way the inflation rate is calculated to better reflect price fluctuations. This lowered the official inflation rate and automatically raised growth estimates for both gross domestic product and productivity. Are the revisions giving a false

picture of U.S. productivity growth? We don't

On the other hand, productivity gains in banking, finance, huge sectors of the economy, don't show up in stats, either (page 76). Thanks to computers, globalism and math wonks who dream up new algorithms, markets are much more efficient than before. In the mortgage market, for example, gains in efficiency are leading to reduced costs and lower interest rates. This is all to the good, but it also makes it easier for people to refinance their mortgages multiple times, which is a relative ease. Yet productivity gains in the mortgage market are not counted. They show up only as hikes in consumer spending, as people take their refi money as gifts for the holidays. So is productivity even higher than the numbers show? We don't know.

The real test is ahead. If high tech and globalization combined to lift productivity back to a 2% or higher growth rate, then the next year or two should prove it. Productivity has done well in the past three years in part because the economy has been so strong. But it must also perform well in an economic slowdown before a definitive test can be made. That slowdown is approaching. Our best hope is that the growth in productivity is no three-year wonder. But we await the test results to be sure.

BLACK EXECS: STILL HITTING A GLASS CEILING

In March, 1988, *BUSINESS WEEK* published a cover story that detailed the progress of black Americans and their hard-won movement into the corporate mainstream. Besides detailing African Americans' rising income and employment prospects, the story matter-of-factly predicted the appointment of the first black CEO of a major U.S. company within a decade. Ten years later, America is still waiting.

While the thought of being lauded as the corporate equivalent of Jackie Robinson seems distasteful to many black managers, the ascension of the first black CEO of a major U.S. corporation will still be as important a "first" as Robinson's triumphs on the baseball field or Roman Catholic John F. Kennedy's winning of the White House. Business success, like politics or baseball, is a reflection of American aspirations.

The good news is that African Americans have made significant progress in Corporate America over the past decade, especially in the second and third tiers of management. A few, such as American Express President Kenneth I. Chenault (page 60), are bona fide stars. It's no longer unusual to encounter black vice-presidents at a wide range of businesses, and senior line managers long ago shed the stereotypical staff jobs that the early ranks of black execs seemed stuck with. Most important, the number of black MBAs has soared. That growing pool of African American talent provides fresh hope that a black CEO won't be an anomaly in a few years.

But for now, the limits to black corporate success appear to mirror the experience of women. The federal Glass Ceiling Commission's 1995 survey of senior-level male managers at major companies found only 0.6% of them to be black. American. So the Franklin D. Raineses of the world (the first black to become chief executive of Fannie Mae on Jan. 1) are fewer than the Jill E. Barads (she is CEO of Mattel Inc.). Most senior black executives would have faced better odds pursuing a top job in academia, government, or at a medium-sized company than at the largest U.S. public companies.

So what, then, is keeping blacks out of the corporate driver's seat? Traditionally, it has been the lack of top-level experience in senior line-management jobs. But that has certainly changed as a growing number of black execs have finally gained the years of industry experience generally considered *de rigueur* for CEOs at many established companies.

In fact, though many managers are loath to say it, discrimination can't be ruled out as one of the reasons for blacks' slow progress. A new National Bureau of Economic Research study, for instance, found that black entrepreneurs are twice as likely to be denied loans from banks than white ones, even when they are equally creditworthy. The award of the CEO's chair in corporate boardrooms may also be less likely to be offered to people of color. Whatever the reasons, the glass ceiling still appears to be with us—only higher.

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BusinessWeek

DECEMBER 28, 1998



EATING DUST IN DETROIT?

Japan unveiled car-truck hybrids years ago.
Now Detroit joins the parade

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Carl Icahn's latest target
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Extra copies of the Investment Outlook 1998 issue are available. For information and prices, call the single-copy desk at 609 426-5348.

Up Front

EDITED BY ROBERT McNATT

UNION DUES

A LABOR LOCKOUT DIMS ABC NEWS

A LOCKOUT OF 2,400 UNION technicians at Walt Disney-owned ABC has put the network's news division in an awkward position.

Since ABC locked out the staffers on Nov. 3, following a one-day strike over health care and other issues, celebrities and top Democrats have honored picket lines. Jerry Springer and Tony Bennett both refused to cross the lines to appear on entertainment programs. And in an even bigger blow to its prestige, ABC News has been denied on-camera interviews during the impeachment crisis with Al Gore, Senate and House minority leaders Tom Daschle (D-S.D.) and Richard Gephardt (D-Mo.), and senators Barbara Boxer (D-Calif.) and Joe Biden (D-Del.). All



SPRINGER: *Won't cross a line*

cite the labor dispute as the reason for their no-show. And because the White House refuses on-camera interviews with companies in labor disputes, aides and Cabinet members are also staying away. "This makes our job a bit more difficult, but it has not compromised our reporting," says ABC spokeswoman Eileen Murphy. She says reporters can still talk to Democrats and Administration officials off-camera. But for a visual medium, that is clearly second best. *Aaron Bernstein*

PAPER PLAYS

TEL-SAVE TO SHORT-SELLERS: YOU WIN

AILING TEL-SAVE.COM, LONG the target of short-sellers, launched a war on the shorts earlier this year with a ruinously expensive, \$281 million buy-back. The short squeeze hasn't worked: Fully a third of the company's remaining shares are still shorted. And the stock has slipped 63% from its February high, to 10%.

Now, new CEO Gabriel Battista says he's throwing in the towel. Because the upstart long-distance company needs the capital, he is ending the campaign that resulted in the pur-



chase of 16 million of the 65 million shares outstanding. "Let the shorts take care of themselves," says Battista, who previously headed Internet company Network Solutions. "We have to get our numbers up."

True. Tel-Save has been in the red both this year and last. By Sept. 30, available cash had dropped to a perilous \$84 million, from \$538 million at yearend 1997. One reason: the financial drain from its 1997 \$100 million ad deal with America Online. Another is the thin margins

Tel-Save makes on its specialty, cut-rate phone calls. Guess that buyback strategy was about as helpful as a millstone. *Larry Light*

TALK SHOW "I have no intention of resigning"

—President Bill Clinton

I-WAY PATROL

MICROSOFT MAKES A WITNESS DISAPPEAR

WHY DID MICROSOFT GIVE its own trial witness the hook? On the eve of its historic antitrust trial in September, the software giant named Michael Dertouzos, director of Massachusetts Institute of Technology's Laboratory for Computer Science, as a technical expert. Two weeks later, after he was deposed, he was quietly dropped as a witness.

That might have been the end of it, except that in court on Dec. 8, both the government and Microsoft cited Dertouzos' deposition. The government noted that Dertouzos called Web browsers applications rather than part of an

operating system—which stressed the feds' case. Microsoft fired back that Dertouzos sees the merger of browser and operating system as inevitable—which is a competitive, but none of Microsoft's business.



The feds say Dertouzos believes he didn't sue its case. Microsoft says it charged witnesses before the government entered its foot.

Dertouzos is unsure why he came witness grata but sure he was "a little too independent."

The professor says he agreed to testify after Microsoft's Bill Gates personally phoned him last summer, promising Dertouzos that he would have to mouth the company line. Well, he didn't—admittedly, Microsoft didn't hear what it heard. *Steve*

FAT WALLETS

NO MATTER WHAT, GOLDMAN SPINS GOLD

WHEN IT COMES TO MARKET timing, Goldman Sachs sells its expertise for big bucks.

But its recent track record has been a tad embarrassing. The firm decided to launch a stock offering just before the stock market crested, then withdrew it in September, as the stock market was bottoming out. To make matters worse, Goldman announced on Dec. 14 that its fourth-quarter, pretax profits had fallen 81%, to \$107 million, because of trading losses.

But don't cry for Wall Street's last big private part-

nership yet: For the deal that ended on Nov. 27, Goldman collected \$2.9 billion in pretax earnings, a haul more than the \$3 billion it made in spectacular, record-setting IPOs in 1997. Says Co-Chief

Executive Officer Jon Corzine of Goldman's earnings, "It's been a hell of a run, but the work we've experienced in August, September, and October has been thrilling."

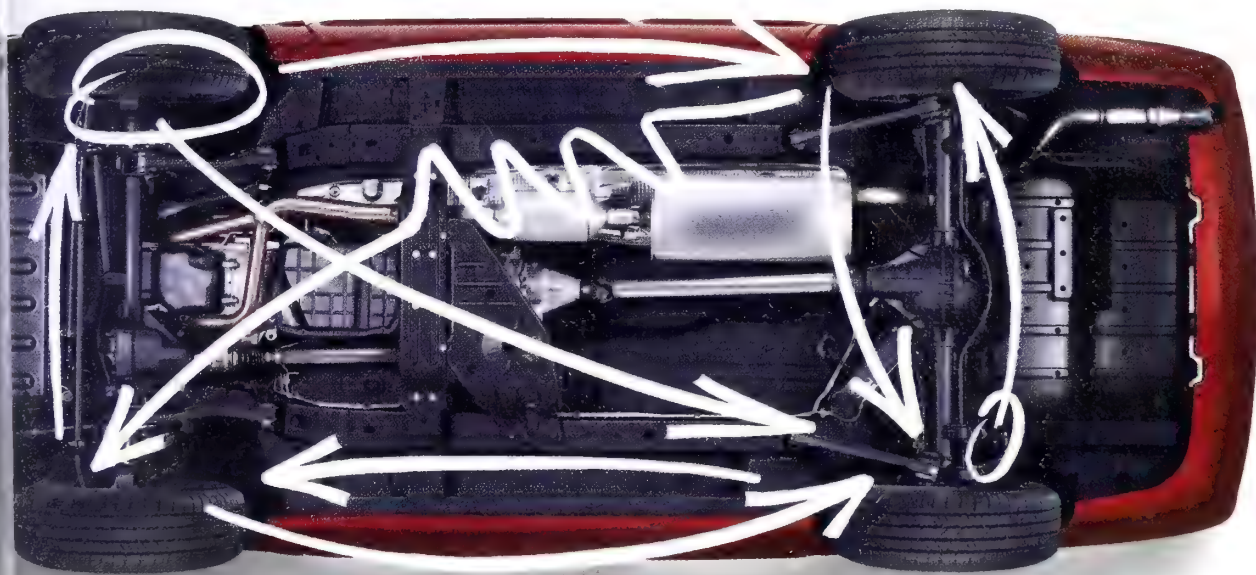
A hot line in the booming M&A mergers-acquisitions business, more than most for trading. And Goldman's head count



CORZINE: "Thrilled" with earnings

by 20%. Okay, bonus is "flattish," Corzine says. But that's after three of 30% bonus growth. Any IPOs in 1999? Could be. *Leah Nathan*

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Up Front

VACATION NATION

DISNEY'S IN DRY DOCK—AGAIN

OOPS! LATE AGAIN. WITH THE adverse publicity Walt Disney suffered because of the twice-delayed premiere of its cruise ship, *Disney Magic*, you would think the entertainment giant wouldn't make

won't officially set sail until Aug. 15, 1999. Disney blames the delay on construction problems at the same Fincantieri shipyards in Italy that built *Disney Magic*.

Yet even as it took reservations, Disney says it knew the delay of the first ship would put the second one behind schedule. "It didn't come as any surprise," says spokeswoman Amy Foley—though it sure may have surprised some customers. Disney had to rebook an undis-

closed number of passengers on the *Magic*, giving them \$250 to spend on board. Travel agents predict that Disney will do what it has to do to keep the cruising public coming. Even if they come five months later than they planned. *Dennis Blank*

another such mistake. **MAGIC:** The ship that finally appeared

Disney Cruise Lines has stopped taking reservations for the March 15, 1999, inaugural sailing of its second ship, *Disney Wonder*, because that floating extravaganza won't be finished on time either. The 2,400-passenger ship now

OVER THERE

A NOT-TOO-SWIFT KICK AT KICKBACKS

IN THE UNITED STATES, IF your business offers a bribe to win a foreign contract, watch out! You've just committed a crime. Do the same in France, and congratulations! You've won a tax deduction.

But this gravy train may be ending soon: On Dec. 17 in Paris, 34 industrial nations—including France—will celebrate the first anniversary of a multinational treaty outlawing corporate bribery.

Trouble is, France and 23 other signatories have not yet ratified the agreement. The U.S. has done so, along with other major players such as

Germany and Japan. Yet the U.S. wants stronger enforcement. Secretary of State Madeleine Albright, for instance, has recently criticized the Japanese for their insufficient efforts at stemming corruption.

Why the foot-dragging? "It's a big challenge to convince business that they will not lose their competitive advantage," says Seth Goldschlager, director of a new, privately funded Center for Anti-Corruption Compliance, in Paris.

He says the organization has drawn up "best practices" programs that can help companies comply with the anti-bribery treaty. Considering that the center cannot offer kickbacks, however, it may have a hard time finding clients. *William Echikson*



DRAWN & QUARTERED



SOFTWARE SAGAS

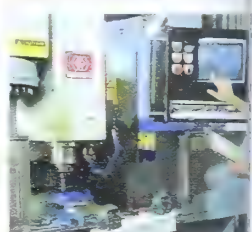
TEACHING OLD TOOLS HIGH-TECH TRICKS

A SLICK SOFTWARE MANUFACTURER in Ann Arbor, Mich., is making sexy profits from an important, but decidedly unsexy, part of the economy: machine tools.

How so? Say you have an aging 18-year-old vertical turning lathe—which you would if you were a company like Detroit Diesel—and wanted to keep it cutting steel for engine parts. The lathe's failure would crimp production, but a new machine would cost \$250,000.

So Detroit Diesel hooked up the lathe to an old personal computer. Special software from Manufacturing Data Systems Inc. then allowed it to run efficiently again, and all for only \$20,000.

MDSI introduced the ware that made it possible in March, 1997. Now it has a share of the market for what's called software computational controls. The company had only \$6.7 million in 1998 revenues. But it



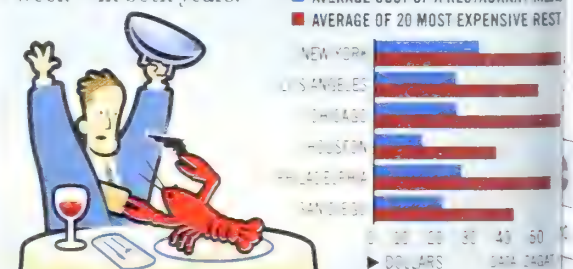
LATHE LIFT: Detroit Diesel

is projected to grow at an annual compounded growth rate of 103% over the next five years.

Which shows how so-called wizards can put some old tools into smokestacks, and make some money out of it. *De'Ann Williams*

THE BIG PICTURE

THE HIGH COST OF VITTLES In a survey of 30 markets, the price of an average restaurant meal edged to \$21.61 in 1998, from \$21.14 in 1997. On average, diners said they ate out at the same rate—about 3.6 meals a week—in both years.



FOOTNOTES Projected Broadway ticket sales for the 1998-99 season: **\$580 MILLION** for 1997-98: **\$558 MILLION**

Q: In corrections and bear markets since 1926, small-company stocks have performed better than large-company stocks.

- True
- False



A: False

Small-company stocks have outgained large-company stocks over the last 70 years. But in market declines, large-capitalization stocks have fared much better. The reason? Large caps represent shares of well-established companies that investors often turn to in times of volatility. Also, the shares of such seasoned companies are more actively traded and are easier to buy and sell, making them more attractive in weak markets. Long term, you can enjoy extra returns from small stocks, but large caps can better endure sharp declines in the short run.

Source: Ibbotson Encorr, Fidelity Investments, 1998.

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Infocommunications take hold in Asia

With much of Asia still struggling to recover from last year's economic crisis, the telecommunications industry is now seen as having a key role to play in the industrial restructuring that is needed to turn around the ongoing crisis. This has prompted many Asian countries to start the process of developing and deregulating their telecom markets.

As one of the leading players in the infocommunications industry, NTT (Nippon Telegraph and Telephone Corporation)

continues to regard the region as a vital component of its global operations, and is now making moves to strengthen the financial and risk management activities for its projects throughout Asia.

The NTT group is currently stepping up its investments in Asia, in tandem with the expansion of its global services, provided under its Arcstar brand name. Working within the framework of each country's respective regulations, it aims to increase its participation in the management of

other international carriers, while expanding connectivity — through, for example, interconnection arrangements with individual carriers around the region.

NTT is also developing new multimedia markets, one example being the AT (asynchronous transfer mode) international interconnection tests that are currently in progress between Japan and Hong Kong, Thailand, Indonesia and Malaysia under the aegis of the Asian Multimedia Forum (AMF).

AMF: bringing a multimedia project to fruition



NTT President Jun-ichiro Miyano addresses a gathering of the Asian Multimedia Forum (AMF).

Set up in June 1997, the AMF was created by leading companies working in the infocommunications arena to promote the development of multimedia applications and services. The 40 participating companies, as of June 1998, include carriers, vendors and trading firms, most of them based in the Asia-Pacific region but also drawn from the United States and Europe. In addition to the ATM interconnection tests, the AMF is conducting various other international multimedia projects, such as satellite infrastructure verification trials. Since its inception, NTT has served as the organization's secretariat.

A global presence through joint ventures and partnerships

NTT recently established two joint ventures in China: Beijing Telecom NTT Engineering (BNTE), together with the Beijing Telecommunications Administration; and Shanghai NTT Telecommunications Engineering (SNTE), with the Shanghai Posts and Telecommunications Administration. Arcstar is assisting both of these initiatives in the provision of global system integration services.

The group's management participation includes Sri Lanka Telecom; Asia Internet Holding, which provides Internet connection services in the Asia-Pacific region through its Internet backbone; and Smart Communications in the Philippines, which offers operational and technological support for local public telephone services.

Service licenses were recently awarded in Singapore to the StarHub consortium, which consists of NTT, Singapore Technologies Telemedia, Singapore Power and BT. Plans call for public basic telecommunication and public cellular mobile telephone services, which are scheduled to start from April 2000.

Furthermore, NTT has signed contracts with individual telecommunications authorities and local carriers to establish several million new telephone lines around Asia.

NTT's major projects in Asia



NTT service base

Linking Asia, America and Europe via submarine cables

China-US and Japan-US Undersea Fiber-Optic Cable Network projects



NTT is also active participating in the intercontinental cable network projects. The China-undersea fiber-optic cable network is scheduled to go into operation at the end of 1999, to meet the growing demand for international telecommunications services in the Pan-Pacific region

including Japan, the United States, China, Korea and Taiwan. The Japan-US submarine cable network, which is due to start operations in the second quarter of 2000, will connect Japan with the US mainland via Hawaii. To meet the increasing demand for multimedia traffic on the Japan-Europe and Japan-US routes, the planned TAT-14 Cable Network will connect the US mainland with the UK, France, the Netherlands, Germany and Denmark, with services starting in the fourth quarter of 2000.

In the United States, NTT has made inroads in a number of areas in the communications industry. In 1994, NTT assumed a management role in NEXTEL, a move that supports its mobile communication business. In September 1997, NTT acquired 10.5% of Teligent, thereby improving its wireless local access business, and more recently invested in Verio at a level that allows management participation in the provision of global and domestic US IP services. NTT has also opened numerous offices in Europe and Latin America, to support a variety of businesses operating in these regions.

TAT-14 cable network



Arcstar: creating a new standard for global infocommunications

Arcstar, the name chosen by NTT for its global end-to-end communications services, now provides cutting-edge network services, especially in Global ATM. NTT's world-leading ATM technology allows multimedia communications of 120Mbps.

In the United States, a leading vendor has chosen an Arcstar global ATM service to support the creation of a Pacific Rim Area network. Other basic network services include a 24-hour managed bandwidth with 16kbps to 45Mbps capacity that combines communication speed with the availability of connecting points around the clock.

NTT's managed frame relay service ensures economic performance and its global enhanced business network (EBN) service provides secured fixed networking at low cost. The IP backbone service supports the setting up of compact, economical virtual private networks (VPN), while NTT's fax service provides high-quality facsimile, e-mail-to-fax and fax-to-e-mail operations, all at highly affordable rates. Through its one-stop global network and system integration, NTT — under the Arcstar banner — is providing the support needed for the development of the infocommunications industry throughout Asia.

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EDITOR'S MEMO

TIMELY INSIGHTS FOR INVESTORS



Just a few months ago, it seemed as if the market that enriched millions and turned savers into investors was a goner. Since then, stocks have made up the lost ground and even carved out a new high. BUSINESS WEEK has guided our readers through 1998's market rollercoaster all along the way. On Aug. 17, we published "How worried should you be?" at the start of the market's tumble. "Misfire" (Sept. 21), was one of the first articles to describe how secretive hedge funds were roiling the markets, and "Investing—What's your next move?" (Nov. 9) showed how to readjust your portfolio to the post-crisis markets.

We don't wait for crises to write about investing, though. "The new stock traders" (May 4) explored how savvy individuals use online trading and cheap commissions to beat the pros. "Who can you trust?" (Oct. 5) probed how companies massage their

numbers and why investors should be wary of Wall Street analyses.

For the past 26 years, we have published a yearend double issue with analyses of investment strategies that are likely to work best in the coming year. This year, as always, we assess the U.S. and global economy, scrutinize the stock markets at home and abroad, and explore investment vehicles—from bonds and mutual funds to real estate and art. We also offer some new features, including one about safe-haven stocks, for those nervous about the market, and a piece on undiscovered stocks, companies little known on Wall Street but that can yield meaty returns. It all starts on page 79. Happy New Year.

Stephen B. Shepard

Editor-in-Chief

THE IMF: DOCTOR, SAVIOR—OR WASTREL?

Robert J. Barro claims that the International Monetary Fund is the cause of financial crises and should "go out of business" ("The IMF doesn't put out fires, it starts them; Economic Viewpoint, Dec. 7). Using his reasoning, we ought to abolish the medical profession,

which also creates moral hazard. obvious that people who smoke, or too much; and otherwise fail to care of themselves know that they fall back on their doctors. If there are no doctors and other forms of medical treatment, such self-abusive misbehavior would diminish or even stop.

Robert Solow
Bethesda, Md.

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is refreshing that someone speaks against one the world's most redundant and counterproductive institutions. Recently, demanding the IMF's dissolution is politically incorrect but the only way we can save hundreds of billions of dollars. How can anybody in your mind throw \$22 billion at an economic basket case like Russia, as the IMF did last July, after billions had disappeared in that black hole before? How could things ever change, if they check the IMF and its nonelectable exempt officials? The time has come to tell the IMF to close down and its employees to stop rubbing shoulders with the high and mighty and go home—and for free-market forces to take charge of foreign aid.

Norbert Bernhard
Schleitheim, Switzerland

Barro joins many critics of the IMF who are long on rhetoric and short on facts. Three points deserve particular notice. First, Professor Barro argues that the international support package for Russia is based on "hypothetical" promises of improvement. In fact, under the leadership of President Fernando Collor, Brazil has achieved a commendable economic record. Inflation has been reduced from over 2000% in 1994 to under 5% this year, and the country has undertaken substantial structural reforms, especially in trade liberalization and privatization of state enterprises. Preserving these accomplishments is surely a worthy goal.

Second, fiscal discipline urgently requires improvement. This is the central theme of the adjustment program negotiated with the Fund, which is supported by actions that were taken prior to approval by the IMF Board and by a mentality that firmly links continued international support to implementation of responsible and necessary fiscal measures. Success is never assured, but continued efforts to contain economic instability merit international support. Third, Professor Barro argues that the U.S. support package for Mexico in 1995 was a reward for corrupt banking, lax lending and poor macroeconomic policies and that it did not prevent a sharp economic contraction and high inflation—both much worse than Argentina, which followed sound advice. He also says it was judged by observers to be a success only because the U.S. Treasury got repaid. Mexico did experience a severe recession in 1995. But this does not constitute failure. No country can escape the consequences of policy errors. For Mexico in 1995, however, a default on sovereign debt was avoided. This benefited holders of that

debt, it also avoided a deeper and more prolonged recession in Mexico and greater damage to other Latin American economies and to Mexico's trading partners. The fact that Mexico rapidly repaid its loans from the U.S. Treasury is only one measure of success.

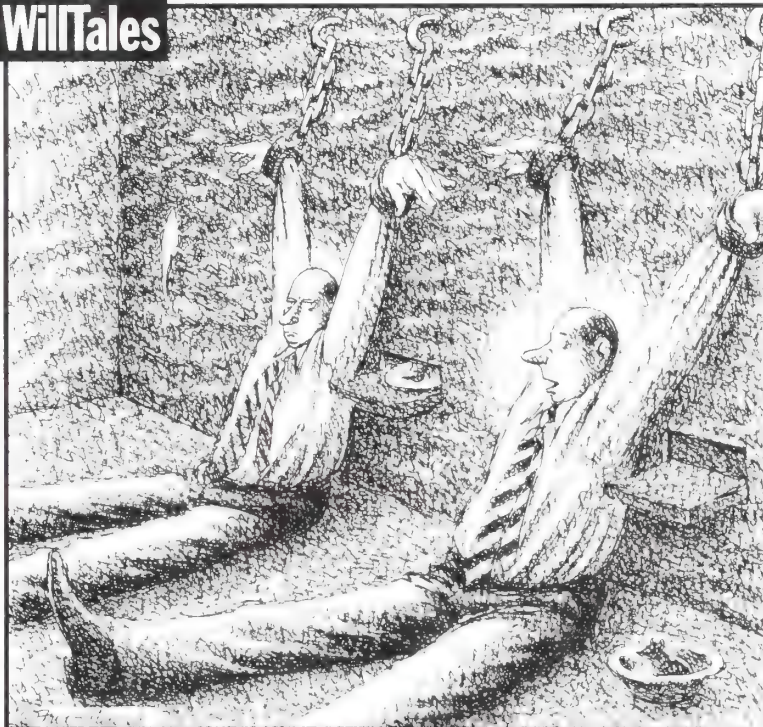
As for Argentina, it faced the spillover effects of the Mexican crisis and also suffered a painful recession in 1995. But with the efforts of its government and with support from the IMF and the international community, the

accomplishments of Argentina's convertibility plan were preserved. The role of the Fund in this success is ignored by many of the IMF's critics.

Third, with respect to the situation in Russia, Barro argues that the Russian government will never formulate a sensible economic plan, but that the IMF will provide Russia with the funds to continue the pretense that it always is repaid. While the Fund has a strong record of collecting on loans, there are, unfortunately, a few cases of countries

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Readers Report

with prolonged arrears. The Fund does not claim it is always repaid on time. Moreover, regardless of what might have been the expectations of some of Russia's creditors, the fact is that Fund disbursements to Russia have been suspended, along with the collapse of Russia's stabilization efforts. Discussions with the Russian authorities continue. Hopefully, a new program to deal with Russia's difficult situation will be agreed upon that will merit renewed Fund financial support.

Michael Mussa
Director of Research
International Monetary Fund
Washington

INDEPENDENT CONTRACTORS ALSO HAVE IT BAD

"When is a temp not a temp?" (The Workplace, Dec. 7) covers only part of the problem. Independent contractors, such as sample and coupon distributors, work at times, locations, and pay assigned by what are really specialized temporary agencies, yet no Social Security or income taxes are withheld. Neither is the employer's share of Social Security paid. As a result, [they]

have to pay double Social Security taxes and report income on IRS schedule C or C-EZ, as if they ran their own businesses. The IRS takes complaints only on form SS-1, which one can submit only if one first starts working for such a company. I was told I wasn't allowed to send a letter.

Furthermore, independent contractors are not covered by workers' compensation and may have to sign a form promising not to sue if injured while working. There are also auto insurance consequences for a vehicle used for supposedly freelance work. In my region, I am mostly shut out of work I enjoy because I refuse to work as an independent contractor.

Delphine Johnston
Winston-Salem, N. C.

DUKAKIS' PHILOSOPHY: AHEAD OF ITS TIME?

In "The governors try to take charge" (Government, Dec. 7), you quote one of Newt Gingrich's lieutenants as follows: "What replaces [rhetoric and grand vision] is competency—get roads fixed, cut taxes, get government more efficient. What we need is a national

mayor or governor." It's funny, much that sounds like: "This election about competence, not ideology" course, when Gov. Michael Dukakis that in 1988, Gingrich's crowd ridiculed him for being too narrow and incapable of thinking as anything but a governor. I guess he was just ahead of his time.

Neil H. Buchholz
Fox Point, N. C.

WHY INDIA'S TECH ELITE IS SO VERSATILE

Thank you for "Whiz Kids" (Management, Dec. 7) on the Indian Institute of Technology. The article accurately conveyed the rigors and competitiveness but left out a key element—the experience was a lot of fun. I found getting into the IIT was the hardest once in, life was much easier (I'm a 1985 graduate of IIT-Madras). We had time to participate in sports and cultural activities, and there were inter- and intra-mural competitions in the hostels (dorms) was full of camaraderie, and people were eager to help their colleagues, in spite of competitiveness.

While there were many smart people

The strength of any element is not in its might but in its ability to adapt.

und, the ones most admired were
se with a wide range of interests—
those who spent their entire life
lying. The IIT tried to instill in us a
se that depth and breadth of knowl-
were important. As you mentioned,
all had engineering workshop, where
learned to operate tools all the way
a handheld files to computer-aided
hines. Most colleges these days are
ng to reduce the student load, re-
ng in a narrowly focused graduate
has a hard time moving between
plines, adapting to new technolo-
or effecting a career change.

Milind Gadre
Fremont, Calif.

ve Jobs, Michael Dell, and Bill
as never even finished school but
built magnificent businesses. That
cause they are whiz kids from birth
perfected this skill throughout their
without any formal training. Same
for your whiz kids from India. You
position the role of IIT in making
kids so whizzy (successful).
side from the skills acquired at IIT,
graduates are so successful be-
they were among the top of the
in India in their abilities (and in
circumstances). And among close
billion people, a good number of
n are fluent in English, this "top of

the heap" is several million people for
the world at large. We should not dis-
count the fact that most of their success
occurred in the U.S., not in India. Their
ability to come to the U.S., operate in
its business environment, and pursue
the American dream has a lot to do
with all these stories.

The U.S. has scores of such Indians
who are equally successful but are not
IIT graduates. They deserve credit as
well in building the image of hardwork-
ing, successful Indian professionals in
this country.

Ajay Tyagi
Marketing Manager, Intel Corp.
Hillsboro, Ore.

RESPECTING FOREIGN MEDIA HELPS THE U.S.

Jeffrey Garten could hardly have cho-
sen a less appropriate example than
Reader's Digest to illustrate his valid
concerns about the exportation of Amer-
ican culture ("‘Cultural imperialism’ is
no joke," *Economic Viewpoint*, Nov. 30).
Reader's Digest does indeed publish in
48 countries and 19 languages and
reaches 100 million readers, but we ex-
port a business strategy, not a culture.

We understand that people the world
over hunger for information that is rel-
evant to their lives, in their...language,

and from their own perspective. And
we produce magazines, books, and other
products that meet that need. For all in-
tents and purposes, each edition of
Reader's Digest is a local product, with
as much as 30% of the editorial content
researched and written by local writ-
ers and edited by local editors. And
Reader's Digest is the only American
magazine with international editions that
I am aware routinely imports overseas
content for the U.S. edition.

This approach has paid off. Our ma-
azines are the top sellers in many mar-
kets. Our German and Italian magazines
recently celebrated their 50th anniver-
sary, our Czech edition its fifth.

I agree that American companies
must be guided by more than business
objectives when entering overseas mar-
kets. *Reader's Digest* has proven that
respect for local cultures and editorial
authority can be compatible with busi-
ness goals around the world.

Thomas O. Ryder, CEO
The Readers Digest Association Inc.
Pleasantville, N. Y.

As someone who has been involved
for several years in Canada's fight to
maintain a viable magazine industry, I
was heartened by Garten's column. De-
spite domination of the Canadian market
(80% of newsstand space is taken by



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claim service confirmed time after time in independent surveys of
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has also produced some impressive financial results. An A++
rating from A.M. Best for financial strength. The recent addition
of our parent company, Cincinnati Financial Corporation
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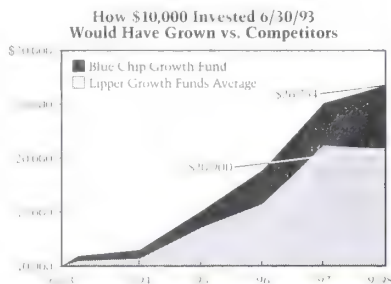
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BY STEPHEN H. WILDSTROM

A LITTLE BETTER, A LITTLE FASTER

Next year will see flat-panel displays on desktops, and zippier Net access at home

As users of personal computers and other high-tech products look ahead to 1999, they should expect more evolution than revolution. But beneath a placid surface, there are stirrings of some exciting things to come.

For PCs themselves, the trend will be to less of the same. There are no dramatic hardware developments on the horizon, unless you can get psyched about processor speeds going from 450 MHz to 500 MHz. Computers will continue to get cheaper, though the price drop will probably slow a bit as demand absorbs a glut of components. Still, the sub-\$500 PC should be commonplace by midyear, along with sub-\$1,000 notebooks for individual consumers. Laptops aimed at more free-spending business buyers will continue to get smaller, lighter, more powerful—and cheaper, too.

WIN 2000 DELAY. The biggest hardware news will be the appearance of flat-panel displays on desktops, both in the office and at home. Prices of 15-in. liquid crystal displays have fallen to just over \$1,000 and will soon drop into the three digits. Because of different measurement standards, a 15-in. LCD offers nearly as much viewing area as a 17-in. CRT monitor—and considerably better image quality.

The big software drama should be Windows 2000, the

operating system formerly known as NT 5.0. Microsoft Corp. is billing it as the operating system of choice for all business computers, from laptops to monster database servers. A future version also will replace Windows 98 on home machines. But the project is way behind schedule. Microsoft officials concede that Windows 2000 is unlikely to ship before the end of 1999—and I wouldn't even

After a couple years of disappointment, 1999 will finally see high-speed Internet access in homes start to become a reality. Cable carriers and local phone companies spy a real business opportunity in adding Internet service to their offerings. Chances are that your neighborhood will initially be offered either two-way cable or telephone-based digital subscriber line (DSL) service. Typically, charges run about \$40 a month for cable-based Internet access and somewhat higher for DSL, but these fees are likely to come down, especially in communities where cable and phone companies are duking it out.

Consumers will find that lines promising speeds of a megabit or more per second

64-kilobit-per-second ISP at home, and a 33.6-kbps up connection on the road.

More important than speed is the full-time Internet connection—no more wait for modems to connect, logging in. This change changes the way you about your computer, as Net becomes a permanent extension of your desktop.

HOME NETWORKS. The simultaneous growth of multiple computer homes and high-speed Internet links will create demand for home networks that allow numerous computers to share a Net connection. The trick to a successful home network is simple setup and operation, without expense and disruptive rewire. Products just hitting the market meet those requirements and I'll be writing about them in an upcoming column.

Outside the home, global wireless communications all sorts will take off in the U.S. as network coverage improves and competition among carriers drives prices down. All sorts of new wireless devices also will emerge. For example, 3Com Corp. is developing the Palm with a built-in wireless modem, while a number of phones that include operators and E-mail will hit the market.

No discussion of the year 2000 would be complete without mention of the Millennium Bug. My prediction: By the year 2000 dawn, most things will go on without a hitch. For all the dire predictions and perils known about the advance don't cause disaster because most people are idiots and take prevention. Companies are working all out to deal with Y2K problems. Some small businesses are ignoring them and going to get burned; thousands of us are apt to escape relatively minor glitches. 1998 draws to a close, and everyone happy and healthy computing in the last year of the century.



bet on that. The other major operating system in the works, Apple Computer Inc.'s Mac OS X, also is headed for yearend release. It offers better memory protection and improves your ability to do tasks simultaneously.

won't boost sluggish Web access all that much. On big file downloads, you'll realize the full potential of a high-speed circuit. But for viewing Web pages, I find surprisingly little difference among my T-1 connection in the office, my

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HE'S SHY, RUDE, AWKWARD—AND BRILLIANT

Most media moguls—Murdoch, Redstone, Turner, Eisner—are famously idiosyncratic. They run their own rules. But there's a con who makes the rest look conformists: Samuel I. "Si" Newhouse Jr., who, along with his younger brother Donald, controls Advance Publications Inc.

Shy though they may be, most of their moguls run public corporations. And they're in business to make money.

Not Si. His \$9 billion empire is as elusive as they come. As for profits, he's against the idea. But what he is more intangible:

prestige, buzz—as reflected in his highly prized Condé Nast magazines such as *Vogue*, *Vanity Fair*, *Glamour*, *GQ*, and *New Yorker*. Running the magazine for a record 17 years, Newhouse is not a model CEO. He is, in other things, shy, insecure, awkward, rude, crude—his way, brilliant.

So reports Carol Felsenthal in *Citizen Newhouse: Portrait of a Media Merchant*, an unauthorized, relentlessly gossipy if less-than-flattering portrait of the Newhouse family—with emphasis on Si.

In addition to the glamour factor, the family seems certain to snag shelf space as a fortunate prepublication opportunity. Felsenthal originally signed the contract with Viking. But in 1996, Si, Viking's parent, acquired G.P. Putnam and made former Putnam President Hyllis Grann head of the merged company. That posed a predicament. In Felsenthal had stirred up a public brouhaha with *Power, Privilege* and *Post: The Katharine Graham*

Story, also unauthorized, not friendly, and published by Putnam. After Grann read the 800-page Newhouse manuscript, she rejected the book—but paid Felsenthal the full agreed-on advance. As Felsenthal tells it, Grann said it was "wonderful...but unfortunately a friend of hers appeared on nearly every page." Many other publishers passed on the book. It finally found a home at Seven Stories Press, a small New York house.

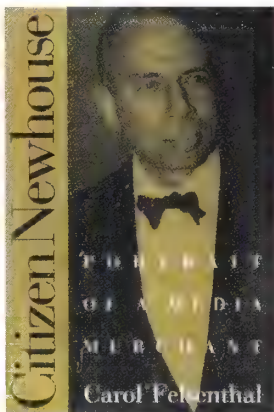
Mainline publishers' lack of interest certainly didn't stem from faults in the book, for there is a rich tale to tell. Start with the two protagonists: Sam

Newhouse Sr. and his son Si. Other than a common unprepossessing demeanor, they seem to have come from different planets. Sam Sr., the eldest of eight children of Jewish immigrants, was humble and self-effacing, even after he got rich. He started as an office boy at a New Jersey weekly, the *Bayonne Times*. Sam had little interest in newspapers but liked making money. Gradually, he acquired some 25 papers,

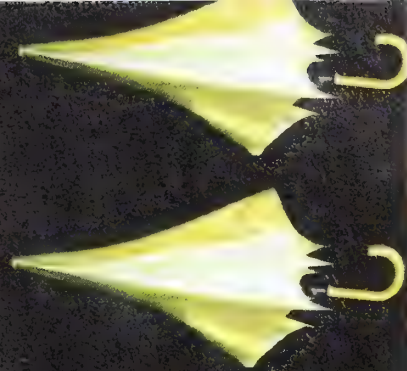
most of them local monopolies such as the *Cleveland Plain Dealer*. His financial strategy could be summed up in the word "frugality"—no corporate headquarters, no secretaries, no files. Several of his papers were rated the worst in the country.

In time, Sam's younger son Donald gravitated to management of the newspapers, which he runs today. But Si seemed directionless until his mid-30s. According to *Citizen*, Si had "no particular cultural or intellectual interests." He "seemed always on the prowl for the thing or the person that would give him some center to his life."

That became Condé Nast, publisher



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MIRABELLA LEARNED SHE WAS BEING REPLACED AT VOGUE WHEN HER HUSBAND HEARD IT ON TV

of *Glamour*, *House & Garden*, and *Young Brides*, which Sam had given to his wife, Mitzi, for a 35th-anniversary present. Sam wasn't pleased about Si's involvement with mostly low-margin magazines, but he eventually acquiesced.

Si's metamorphosis into perhaps the reigning arbiter of high-end glitz is not only curious but mysterious—even, I suspect, to the author. One key element has been Russian-born Alexander Liberman, an influential figure at Condé Nast and one whose esthetic vision has shaped the entire company. Just as important, Liberman shaped Si. "Some say Alex is superficial," says Felsenthal in *Citizen*, but "Si saw him as stunningly stylish." With Liberman's help, Si began "assembling an image to present to the world."

But the image was often blurred. Si's vision is still a work in progress. Even in the early 1970s, says *Citizen*, Si "showed signs of tiring quickly of certain artists, whose work might be there [on his wall] one cocktail party and gone the next." His choice of female companions, after di-

vorce from his first wife, reflected similar capriciousness. Newhouse eventually settled down into a second marriage to Victoria Benedict de Ramel, an editor and writer of architecture books.

Uncertainty at Condé Nast shows no sign of abating. When Anna Wintour became editor of *House & Garden* in 1988, employees rushed to upgrade wardrobes "to avoid the disapproval of the chic and skeletal Wintour." One woman observed that "riding up the elevator in the company of Anna Wintour can consume a year's worth of self-esteem."

More substantively, Si habitually fires publishers, writers, and, especially, top editors. Casualties include Diana Vreeland, William Shawn, Robert Gottlieb, Grace Mirabella, Paige Rense, Anthea Disney, Amy Gross, Lou Gropp—and, last August, Ruth Whitney from *Glamour*.

Newhouse's style of dismissal is legendary. When Gropp, editor of *House & Garden*, was vacationing in 1987, he telephoned Si to check in.

"Lou, have you been reading *Women's Wear Daily* while you've been on vacation?" Si asked. Gropp said he hadn't.

"There have been a lot of stories in *WWD* [saying] that Anna Wintour is going to become the editor of *House & Garden*," Si said.

"Well, is that true?" Gropp asked. "Yes," replied Newhouse.

In 1988, Grace Mirabella learned she was being replaced at *Vogue* by Anna Wintour when her husband heard the news on TV.

In her memoir *In and Out at Vogue*, Mirabella said the 1980 dismissal of Diana Locke from *Self* "is still seen as many... as the blow that ushered in a new era of disloyalty, insecurity, and cutthroat competition that plague the magazine world in our day." Felsenthal says the rapid changes at Random House "have spread not only through the various Random House imprints but through New York publishing as a whole. Feeding frenzies in search of

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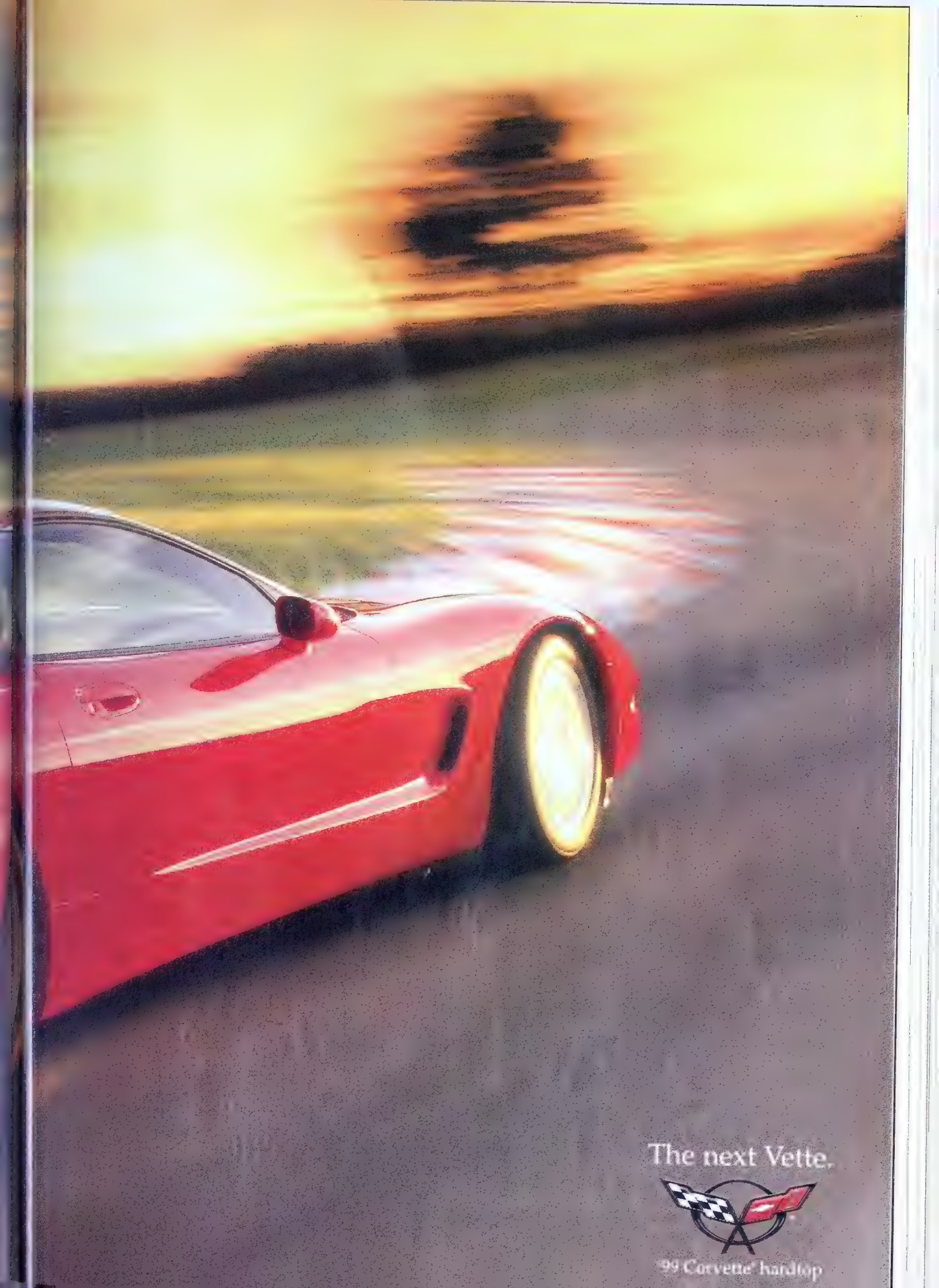
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next sure thing have become the of the day."

Last May, Si's empire was reduced to the spectacle of what seemed like a suicide: Steven T. Florio, president of Condé Nast, fired his own brother, Tom Florio, president of *The New Yorker*. It seemed almost as if Si's empire was consuming itself.

For media junkies, *Citizen Si* is a feast. The Newhouses decline to cooperate, but Felsenthal conducts interviews, and the book—a vast pendulum of facts, quotes, and anecdotes—shows it. While the doings of Random House, *The New Yorker*, and other properties have been extensively reported in the press, she gives new details—such as André Schifano's

Despite the wealth
of information the
author has marshaled,
the narrative
seems bloodless

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baroque dismissal from Pantheon 1990.

Oddly, however, the reader may feel less than satiated. One failing is Felsenthal's sketchy portrayal of the embezzlement. The book notes an oft-quoted truism that "Donald makes the money and Si spends it," but it doesn't go further than that.

Moreover, despite all the facts the author has marshaled, the narrative seems bloodless—mainly an avalanche of often unsifted information requiring the reader to determine which details are important and which are not. One yearns for more connection in the narrative to put the drama into a clearer perspective.

Finally, for all the attention given to Si, he remains a remarkably opaque character. He is capable of such shrewd moves as the recent repositioning of *Details* from a quirky, aimless, downtown magazine into a stylish, repositioned magazine for men in their 30s. Si has a keen eye for talent, such as Tina Brown. But he is also capable of the most destructive personnel moves. Even at the end of the book, the reader may wonder what to make of this curious man, let alone his legacy.

BY CHRIS W.

Senior Editor Welles is a media journalist.

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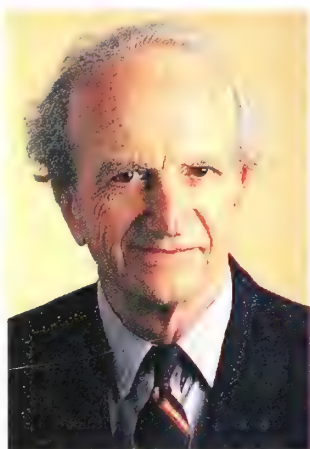
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BY GARY S. BECKER

HOW THE U.S. HANDCUFFED THE CRIME RATE



BOOK 'EM:
While stronger families and antipoverty efforts help, increased safety has come from better police work and sterner judges

The most important improvement in the conditions of daily living in the U.S. during the past two decades is due not to low unemployment or continued prosperity but to the sizable fall in crime. This decline dramatically reduced the fear of becoming a victim on the street, in schools, or in the privacy of homes. Many factors contributed to the lower rates, but the single most important one has been the greater apprehension and punishment of criminals.

The Crime Victimization Surveys of households provide a better picture of the total amount of crime than do the more commonly cited statistics on crimes reported to the police. These surveys indicate that American property crimes per household fell rapidly in the '80s and '90s and are now at just half the rate of 1980. Crimes of violence have also fallen, but much more slowly.

This large drop in crime is even more impressive because it followed extremely rapid growth in robberies, theft, and violent crimes during the previous two decades not only in the U.S. but in Europe, Latin America, and Africa. Moreover, crime has continued to rise elsewhere, so that per capita property crimes are now higher in many European countries than in the U.S. In a remarkable turnabout, the burglary rate in England went from half the American rate in 1980 to double that rate in 1995.

Many international organizations avoid meeting in such cities as Mexico City or Rio de Janeiro because they cannot guarantee the safety of participants. Not long ago, one of my colleagues and his wife were kidnapped for a few hours after hailing a cab in front of a Mexico City restaurant.

FAR FROM HELPLESS. Conservatives blame the growth in crime since 1960 on the breakdown of family values and morality, whereas liberals attribute it to unemployment and alienation from society. But the U.S. is a good counterexample to both views, since crime grew rapidly during the 1960s and 1970s, when American unemployment was low and families were stronger. Crime rates have fallen since the early 1980s despite a widening of income inequality, a further breakdown of traditional families, and no obvious recovery of morality.

Most nations act as if they are helpless in the face of powerful forces to arrest what they consider a crime "epidemic." But Amer-

ica's experience indicates that crime can be fought while preserving political and civil freedoms. It is not necessary to wait through a long wait until improvements in education and morality bring down crime rates. They can be quickly cut by increasing the apprehension of criminals and by sentencing those convicted of serious crimes to significant prison terms.

NO PARADOX. Studies by the economist Leavitt of the University of Chicago and others show that the increase since 1980 in the courts' propensity to convict and imprison criminals made a major contribution to the sizable fall in U.S. crime. Persons behind bars cannot commit crimes against the public, and many people have been deterred from a life of crime by the increased prospect that they would spend a considerable time in prison. A *New York Times* headline several months ago proclaimed that "Prison Population Growing Although Crime Rate Drops," but this "paradox" disappears once it is appreciated that the growth in prisoners helped reduce crime.

The U.S. prison and jail population has grown to more than 1.7 million, or to about 1% of the adult population. A sad comment on modern morality is that so many people must be jailed to bring crime down to tolerable levels. It is also highly disturbing that black men are eight times more likely to be imprisoned than white men, which forces the need for better education and a more stable family life among blacks. At the same time, however, poor blacks and inner-city residents have benefited from the much greater imprisonment of persons committing serious crimes, since they are most likely to be the victims.

Some intellectuals have perpetuated an enormous myth—and delayed effective progress against crime—by claiming that crime is so deterrable, that it is related in an unbreakable way to poverty, and that it can be reduced only by drastic social reforms. In fact, the U.S. has shown that the poor and others can be deterred from crime by stacking the odds against criminals.

Countries that develop an effective system of apprehension and punishment of criminals won't have a magic weapon against crimes. But they will greatly improve the daily conditions of life for the vast majority of their citizens.

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution

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BY GENE KORETZ

DOWNSIZING'S ECONOMIC SPIN...

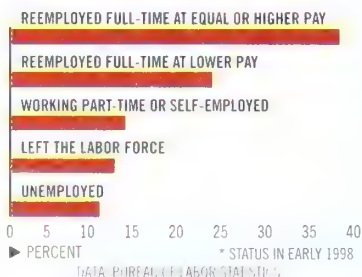
Job creation outruns layoffs

If anyone still thinks that large-scale job-cutting has not become a permanent aspect of U.S. corporate strategy, the latest tally of layoff announcements by major corporations should remove any doubts. According to outplacement firm Challenger, Gray & Christmas Inc., planned job cuts through November are up more than 50% over 1997 and apparently headed for a record.

It's no secret, of course, that the pick-up in layoffs is mainly a response to profit pressures resulting from the Asian crisis and financial-market turmoil. But

WHAT LIES IN STORE FOR DISPLACED WORKERS?

STATUS OF FULL-TIMERS WHO LOST PERMANENT JOBS IN 1995-1997*



the real question is what it bodes for America's 7½-year expansion and for affected workers.

On both counts, most economists are sanguine—at least for now. L. Douglas Lee of HSBC Washington Analysis sees the surge in layoffs as evidence that U.S. companies remain determined to keep their long-term advantage in a sluggish and increasingly competitive world economy. Also, to the extent that their quick action shores up profits in the short run, it will help prevent the kind of severe stock market correction that could send the economy into a tailspin.

If the economy should really start to slump, of course, the alacrity with which companies begin slashing payrolls could turn into a liability. In a worst-case scenario, such strategies could touch off a vicious circle—as laid-off workers and those fearful of getting the sack rein in their spending and thus undercut demand and profits even more—inspiring new rounds of layoffs.

Fortunately, the chances of such a development in the year ahead seem slim. Economist Maury N. Harris of PaineWebber Inc. observes that job creation has been far outpacing layoffs. Although an estimated 3.3 million workers were permanently displaced from jobs in 1997, for example, nonfarm payrolls still surged by an impressive 3.4 million.

Even earlier in the expansion, many displaced workers had little trouble finding new jobs. Of some 4.6 million workers laid off in 1995 and 1996, notes Harris, about 40% were reemployed within five weeks and more than 60% within 14 weeks. And by early this year, he adds, around 84% had found work, while a further 11%, many of them 55 and older, had left the labor force.

With unemployment now at its lowest level in several decades, Harris thinks the upcoming wave of laid-off workers should have an even easier time. "No one likes to be laid off," he says, "but the fact that unemployment has fallen this year while layoff plans have been rising is reassuring—both for workers at risk and for the overall economy."

...AND ITS IMPACT ON JOB-LOSERS

Older workers still take a big hit

What do laid-off workers have to fear in today's labor market? For those only a year or two on the job—especially younger workers, the issue may not be a burning one. But for many of those severed from more permanent jobs, it's compelling. That's why the Labor Dept.'s latest survey of displaced long-tenured workers conducted in early 1998 is so revealing.

Looking at the 3.1 million workers who were laid off from full-time permanent jobs (held at least three years) from 1995 through 1997, the survey found that in many respects their fates were comparable to those found in the 1996 survey for workers laid off in 1993 and 1994. Specifically, in each case about 67% of workers were reemployed at full-time jobs, 14% to 16% were working part-time or at home, and 12% to 14% had dropped out of the labor force.

The main difference was that recent earnings declines were far less pronounced. Whereas 55% of reemployed full-timers in the earlier survey experienced pay drops, and 34% of them suffered cuts of more than 20%, the figures in the 1998 survey were 38% and 21%, respectively. And the median period be-

tween jobs fell from 8.3 to 5 weeks.

In addition, the reemployed full-time contingent's median weekly earnings were up about 2% in the 1998 survey compared with a 14% decline in the earlier survey. However, all of the recent increases accrued to younger workers. Those from ages 45 to 64 were still with pay declines averaging 10%.

In short, the severe earnings declines suffered by earlier groups of displaced full-time workers have diminished significantly as the expansion has continued. But with only two-thirds of those laid off in recent years back at full-time jobs and nearly 40% of full-timers taking pay cuts, it's clear that many workers, particularly those over 45—continuing to suffer considerable economic pain.

U.S. LONGEVITY IS ON A ROLL

Racial and gender gaps decline

After several years in which it lagged back on a growth track, U.S. longevity is back on a growth track. According to MetLife demographer Stanley Kraus, life expectancy at birth set a record in 1997 for the second year in a row, reaching 76.4 years. If his latest estimate on the mark, life expectancy for newborns has already climbed by a full year during the 1990s.

Several trends are apparent in the latest longevity numbers. One is a narrowing in the gap between racial life expectancy of blacks has recently risen faster than that of whites. Another is a rapid narrowing of the gender gap, as male mortality rates, particularly for those 65 and older, have fallen far faster than female rates.

Indeed, while concern about a looming Social Security deficit has focused on the coming retirement of the baby-boom generation, the continuing advance in life expectancy among seniors promises to place a far greater burden on the system's resources. For Americans as a whole, life expectancy at 65 has increased by a full year since 1980, and it is currently projected to by an additional two years by 2050.

LOOKING FORWARD TO LIVING LONGER



Supply Chain:

**Managing Logistics
For the 21st Century**



Supply Chain:

Managing Logistics For the 21st Century

Companies do not compete. Supply chains compete." So says third party logistics provider Skyway Freight Systems Inc.'s President and CEO, Charles Loundsbury.

Supply chain management is turning the world of business on edge, figuratively and literally. Figuratively because it has blurred traditional functional and corporate boundaries, and presented challenges not imagined during the quality process trend of the 1980s. Literally because the supply chain concept cuts horizontally across a business world that heretofore has been organized vertically by functional "silos" such as manufacturing, finance, marketing and logistics.

Earlier in this decade, farsighted companies made substantial commitments to adopting supply chain management strategies, resulting in culture shocks that are still reverberating through their ranks, their suppliers, and even their customers. Yet, in the rest of the business world, the shift to supply chains has just started.

Supply chain management is a simple concept. Some say, in fact, that well-run businesses have been practicing it since the apple was first successfully marketed and delivered to Eve. Here's the basic definition supplied to this year's gathering of leading shippers at the Council of Logistics Management (CLM) annual conference in

Anaheim, California by Douglas M. Lambert, Ohio State University Raymond E. Mason Professor of Transportation and Logistics:

"Supply chain management (SCM) is the integration of key business processes from end-user through original suppliers, that provide products, services, and information that add value for customers and other stakeholders."

CONTINUED



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The basic definition is simple, the application is not. Today's demand for precise delivery of just the right product to consumers who want it at the lowest delivered cost creates powerful challenges for logistics managers crafting their SCM process.

How do major shippers view their efforts to adopt supply chain strategies within their organizations?

"Bloody," says Jon D. Calvin, director logistics and product supply, Goodyear Tire & Rubber Co.

"Painful," says Steve Lauderbaugh, supply chain project manager, 3M.

But worth the effort, they both agree.

"We see the potential for \$18 million per year in transportation savings, of which we've so far achieved \$2 million," according to Robert E. Stickman, director, Western Region, Sharp Electronics Corp. "This process is new at Sharp."

Cost savings of that magnitude are generally available to companies — large and not so large — that make the commitment to SCM, according to the experts.

"Those with best-in-class supply chain management practices are outperforming their average-performing competitors in all sorts of ways," says Bill Helming, director, PRTM, a global management consultant to

technology-based businesses. The advantages include "10 to 30 percent higher on-time delivery performance, a 40 to 65 percent (or one-to-two month) advantage in cash-to-cash cycle time, 50 to 80 percent less standing inventory...The savings potential of a highly effective supply chain can translate into three to six percent of company's revenue."

That's right. Theorists and practitioners agree that bottom line earnings improvements of up to \$100 million dollars are achievable for a \$100 million company which thoroughly adopts SCM.

"Those with best-in-class supply chain management practices are outperforming their average-performing competitors in all sort of ways."

—Bill Helming, PRTM

What About Reality?

Almost everybody's talking about it, but fewer are actually doing something about SCM, particularly when it comes to logistics. Among logistics professionals who were interviewed for this special advertising section, there was general agreement that the business world has yet to fully realize the benefits

of supply chain management.

"I wouldn't call them strategies exactly yet," says Greg Girard, research director, supply chain execution, AMR Research. "Some companies are moving toward providing coordinated global logistics services to the key customers. In most instances, suppliers are still spending the majority of their supply chain

CONTINUED

Supply Chain Management: What It Is

Making what consumers want NOW in the most efficient and profitable way possible is the mother of the SCM invention. The process may involve buying raw materials more conservatively or assembling parts closer to the final destination. Blue computers may be the current rage, but if the next hit movie features a red one you'd better be ready to change your pigment order in a flash. A well-constructed supply

chain is intrinsically flexible.

Michael Aghajanian, a director of PRTM, provides a concise explanation of the role logistics plays in supply chain management.

"For far too long, senior managers thought that logistics and transportation were supply-chain management. Logistics and transportation need to be solidly linked to all of the process elements of the supply chain. And only then can

managers understand the entire chain of cause and effect that a supply chain really is."

A tool for reconfiguring supply chains has been developed by PRTM, AMR and the Supply-Chain Council. The Supply-Chain Operations Reference-model (SCOR) has been used by more than 400 leading companies, and information is available from the Supply-Chain Council (www.supply-chain.com).



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effort on how they handle their customers' front-end needs in order management.

"Few companies now have global logistics capabilities. We're seeing a lot of companies focused on improving the business processes, information systems, communications networks, and core carrier programs needed to deliver superior global logistics service."

► Taking the First Step

The buzz at another industry gathering this fall seemed to confirm this observation. "The 4th Annual Best Practices in Supply Chain Management" conference, where some 50 supply chain managers paid up to \$2,200 each to attend a three day seminar in Scottsdale, AZ, featured a keynote address by Arthur D. Wainwright, president and chairman of Wainwright Industries, headquartered in St. Peters, MO.

"One thousand raindrops make an ocean," the Baldrige Award winning manufacturer told the group. "Little things make a big difference. Work it in one step at a time. You must make a cultural diagnostic of your organization before you make change. It takes a long time."

Which explains why many companies haven't taken the first step. They are probably overwhelmed by the very prospect of a process that has, for example, had management attention at 3M for the last six years. 3M is still somewhere in the midst of breaking down functional silos and implementing the company's mandated Supply Chain Excellence process.

Also, a certain part of the reluctance to engage in this new process can be summed up as fear of commitment.

"You date a carrier, but you marry a third-party logistics provider," notes a white paper published by Price-Waterhouse Coopers. "You may think this is an exaggeration, but the decision to implement and inte-



"Little things make a big difference. Work it in one step at a time. You must make a cultural diagnostic of your organization before you make change. It takes a long time."

—Arthur D. Wainwright
Wainwright Industries

grate your company with a contract provider is a far cry from carrier relationships or traditional silo-based management activity."

For the transportation and logistics community, the gap between acknowledging the need for SCM, and implementing it is amplified by the position logistics occupies in the overall strategy.

At the Best Practices In SCM meeting (sponsored by the Institute for International Research), discussio

among major U.S. corporations centered on such high-priority issues as improving customer service and satisfaction, product data management, vendor-managed inventory and so on. Subjects specifically relating to logistics and transportation were not frequently on the agenda, nor discussed much among the participants.

One might conclude that logistics — and particularly transportation — simply are not considered one of the “sexy” components of SCM. A more useful observation, however, is that the importance of logistics is always well understood.

Using TMS

For those who have focused on the subject, the significance of logistics disciplines is clear. “Transportation is a vital link in the supply chain,” says George Gulliford, Jr., product marketing manager-logistics/supply chain, J.D. Edwards. The company develops and promotes supply chain software solutions, including Transportation Management Systems (TMS).

“Any interruptions or delays can cause a significant decline in service,” notes Gulliford. “If the goal is to provide customers with rapid service at an affordable price, then organizations must find ways to decrease transit time while keeping shipping costs to a minimum.”

TMS is a supply chain tool that can “consistently offer

savings in the range of five to 15 percent or more of total transportation expenditures — savings which every logistics executive knows go straight to the company’s bottom line,” states a study published by Ernst & Young and the University of Tennessee.

And the benefits of cost savings can be weighed against the greater customer satisfaction benefits available through TMS.

R’s Greg Girard puts it in perspective: “[Industry leaders] are using transportation as a competitive differentiation to improve customer satisfaction for increased market share and superior financial performance.”

Okay, so maybe you agree that it is important to become a player in today’s evolving supply chain market. If your company is not listed in the Fortune 1000, you are under pressure to improve

bottom line performance sometime before the next millennium (just one year away), can you somehow participate in supply chain’s logistics benefits without making massive investments in total supply chain development?

Absolutely, says Larry Ferrere, vice president, marketing and business development, Vastera. As a provider of international trade logistics solutions, Ferrere has observed that mid-size manufacturers and distributors “are probably in the toughest position” when it comes to adopting SCM. “The larger companies have the clout [with their vendors] and the financial resources to implement SCM, while very small companies are generally niche players often with unique channels and/or products that somewhat insulate them or create competitive barriers.”

The good news is that the lessons learned by big global companies in developing SCM are now available — at reasonable cost and in digestible pieces — for mid-size companies that are seeking to expand their reach into global markets.

In the area of international trade logistics, according to Ferrere, businesses now have software solutions available that manage risk, provide positive return on investment, and offer better analytical capabilities than have previously been available.

Vastera provided such a system to Gilbarco, Inc., a manufacturer of fuel pumps and components. Changes in product technology and regulations gov-

CONTINUED ►

WHY IS SUPPLY CHAIN MANAGEMENT SO IMPORTANT?

► A \$1 billion company can save \$30-60 million

First-in-class companies have an advantage in total supply-chain management cost of three to six percent.

Total Supply-Chain Management Cost



Source: 1997 Integrated Supply-Chain Benchmarking Study, The Performance Measurement Group, A PRM Company

Definition: Total supply-chain management costs, including transportation, inventory, and information management, as a percentage of total supply-chain revenue. (Source: The Performance Measurement Group, A PRM Company)

Sales Order Management

"We used to ship 5,000 pairs of shoes per day. Today, with J.D. Edwards we electronically book and ship up to 55,000 pairs of shoes every eight hours."

Craig Dunlap, Vice President of Global Information Services and Technology
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Vito Palermo, Senior Vice President and CFO
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Libbey, Inc.

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Rollerblade

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Dan Wark, Vice President Operations
Pericom Semiconductor Corporation



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Transportation Management

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Dave Evans, Vice President Productivity Systems

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erning the movement of technology across borders lead Gilbarco to investigate automating their manual processes for international trade. In addition to assurance of legal and regulatory compliance, the company also improved shipping times and customer satisfaction through automated trade practices.

Another improvement was the development of a more informative packing label. Also, captured data provided insightful reports in areas including freight-forwarding payments and harbor maintenance tax coding.

Rather than trying to fill an ocean of opportunity all at once, Gilbarco has successfully tasted the first few satisfying drops as it became a more committed SCM player.

The next frontier in SCM

There are many other companies that have yet to focus on SCM. Steve Nieman, a partner with the logistics consultancy The Tioga Group, cites a current engagement with a highly successful privately owned manufacturer approaching two billion dollars in sales and acquiring up to five small companies per year in an industry "roll-up", but hardly aware of its transportation expenditures (much less using SCM). The company readily admits that they do not know how many private trucks they control, nor even how many truck drivers they have on the payroll. They estimate transportation expenditures at "close to" \$100 million per year for outbound freight.

Centralized management of the logistics function is viewed as counter-cultural while plant managers are virtually free to distribute their products as they see fit.

"So," suggests Nieman, "as we approach the next frontier in SCM, it will include the firm that is just start-



"If the goal is to provide customers with rapid service at an affordable price, then organizations must find ways to decrease transit time while keeping shipping costs to a minimum."

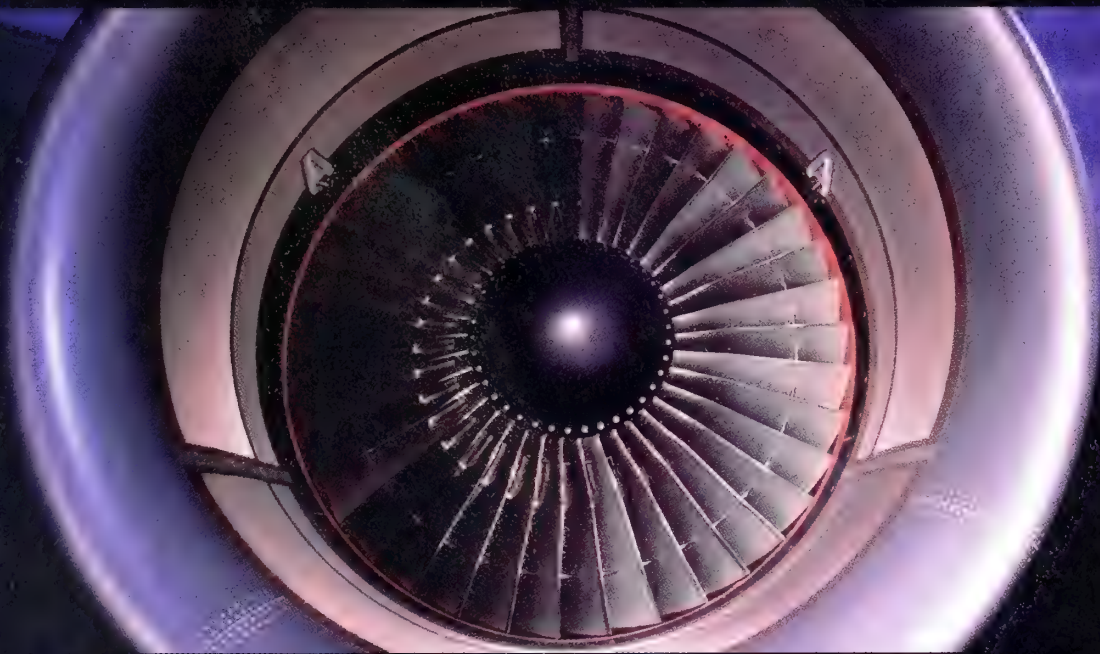
—George Gulliford, J.D. Edwards

ing to realize it might be an area that merits attention but which has unique management practices."

With many shippers unsure of when, how, or if they will adopt SCM, transportation service providers are getting their feet wet — cautiously and deliberately — as they listen to customers and determine what are today's requirements for participating in SCM.

At two leading freight intermediary com- **CONTINUED**

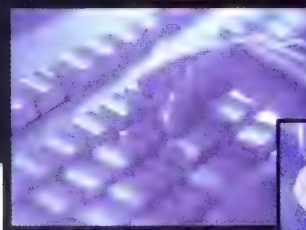
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Every day, the companies of CNF Transportation move almost 100 million pounds of the world's freight. Individually, each ranks among the most respected brands in transportation. Together, they represent the future of distribution in the global market, where innovative ideas and smart technology carry as much weight as trucks, ships and planes. That's what CNF Transportation stands for. And three of the top names in transportation and logistics stand behind it.

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Where ideas carry weight

panies, a traditional menu of transportation and logistics services has continued growing for customers who still want them, while broader logistics programs are also developed for those who want more.

"If the requested service falls outside of our core capabilities," says Larry Henry, vice-president, logistics, Alliance Shippers, "we either assess the investment required to provide the service at a level consistent with our customer's expectations or we will align ourselves with another provider capable of meeting that need and manage the transaction on behalf of our client. We have to date taken the position that we prefer to partner with a third party logistics (3PL) firm if need be rather than become a 3PL."

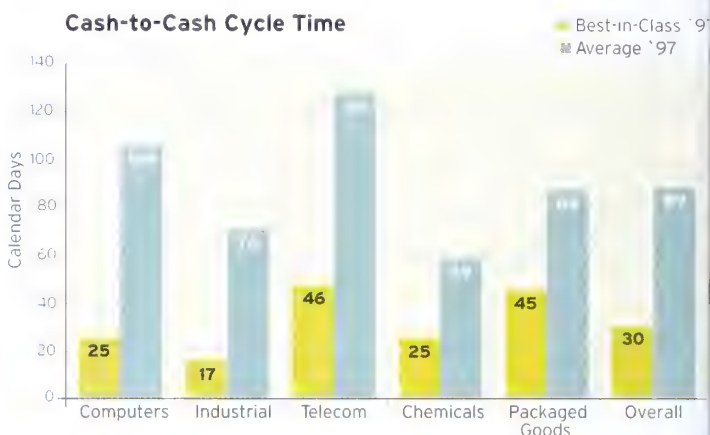
Also, Alliance's Perfect Shipment Program™ provides a data collection foundation that permits customers to receive measurements of logistics performance in line with their specific SCM strategies. "Our enhanced reporting allows customers to both measure the performance of Alliance Shippers as well as achieve a deeper understanding of their own SCM process," says Henry.

Another perspective is expressed by Bill Ditoro, vice-president of supply chain solutions, Hub Group, Inc. "Providers such as Hub Group can and do provide total transportation management packages that revolve around the core competency of providing total transportation management in the intermodal arena...In some instances a

WHY IS SUPPLY CHAIN MANAGEMENT SO IMPORTANT?

Leading companies have cash available two to three months faster

Leading companies have a 40 to 50 percent advantage in cash-to-cash time over average companies



Source: 1997 Integrated Supply-Chain Benchmarking Study, The Performance Measurement Group, A PRTM Company

For production materials. Cash-to-cash cycle time equals total inventory days of supply plus days sales/receivables outstanding minus days payables outstanding.

logistics provider will go a bit beyond their expected arena as we have done. For instance, Hub provides site location and modal modeling expertise. In essence, global logistics providers stay within or close to their core competencies.

A transportation company that has fully embraced SCM is 3PL Ryder System, through its Ryder Integrated Logistics unit. Its philosophy is that, "All companies are engaged in supply chain management, whether or not they have consciously assessed their supply chain as an entity or are focusing on various elements," according to Ed Straw, president.

Even Ryder, with its supply chain focus, cannot handle the entire process alone. Straw explains, "No one third party can provide best-in-class solutions without forging business alliances with other third parties. For Ryder, that has meant alliances with Andersen Consulting and IBM Global Services to supplement and complement their skills in business integration, change management and data processing operations. Our alliance with i2 Technologies offers our customers the best supply chain planning and optimization software integrated with Ryder's own operating systems."

There are about as many perspectives on SCM as the number of players you talk to. Another example is RPS, the \$1.7 billion global small-package carrier

CONTINUED

The Nation's CEOs Look To the Future

Among business trends identified by CEOs, "improving supply chains globally" was judged "major" by 78 percent of 2,500 CEOs of companies with revenue larger than \$100 million surveyed by Louis Harris & Associates earlier this year. SCM's importance to them was exceeded only by three other issues: (1) cost and cycle time reduction, (2) improving knowledge management and (3) globalization.

The same group gave generally low ratings to corporate America for being fully prepared to take advantage of those trends.

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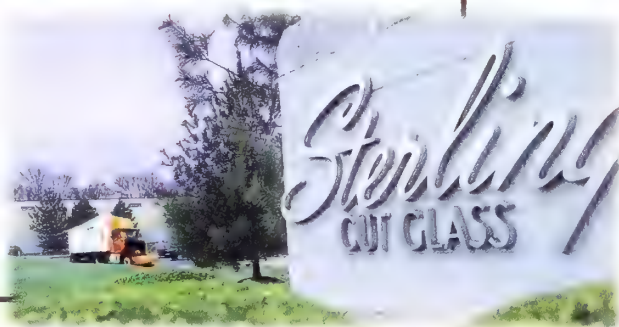
And when Kevin Schwartz, Sterling's transportation manager in Erlanger, Kentucky, chooses his caddie to get it there **on time and intact**, he calls Roadway.



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that has mounted a vigorous challenge to the domination of the market by UPS.

"Small-package business shippers — many of them from the retail industry — had few options for improving information flow and cycle times," says Bramm Johnson, senior vice-president of marketing and strategic planning.

"RPS changed that by customizing shipping programs to support its customers' SCM strategies," he says. "For instance, RPS was the first to offer a "collect" shipping program whereby large retail consignees can control the freight costs of their receivables. Previously, large retail stores would typically pay hefty shipping and handling charges on their large volumes on inbound freight. As a transportation provider and a member of the supply chain, RPS is certainly a proponent of placing a stronger emphasis on better SCM programs."

Among the tools available for more profitable logistics management is Value Manager On-Line, a strategic database for sales analysis, market segmentation and financial competitive analysis available from Standard & Poor's Compustat.

Value Manager provides an important link to SCM strategies for logistics managers seeking a sound financial perspective on distribution operations when weighing trade offs between maintaining in-house distribution systems, or outsourcing to a third party.

North American freight giant Roadway Express (2.7 billion in revenue in 1997) expects to remain a strong competitor within the SCM environment. "We are attempting to take a leadership position," says Ken Olsen, vice-president of marketing. He cites three areas where Roadway can occupy the high ground.

First, Roadway already has in place a leading edge network for the physical movement of freight. "We are



"No one third party can provide best-in-class solutions without forging business alliances with other third parties."

—Ed Straw, Ryder System

in virtually every town in North America almost every day," Olsen notes. Second, the carrier is providing electronic information capabilities that will enable a wide range of customers and vendors to do business with Roadway on the Web. "There will be major innovations and enhancements in the whole Web area shortly," Olsen promises. Finally, he says, Roadway's highly qualified and trained work force will continue to focus on the consumer. "Our people are on the front lines when they can quickly respond to changing customer requirements, as well as identify new opportunities."

Despite the lack of a standardized approach to adop

ing SCM, it's important to note that the benefits are available, and that they are being enjoyed by some companies.

At 3M the process was indeed described as "bloody", but the results are worth pursuing. As 3M's Steve Landerbaugh told his CLM audience, one particular business unit was "burning down" in 1993, and had about one year left to improve results. With SCM implementation and related business changes, that unit has turned around to produce 20 percent annual sales growth, with supply chain improvements that have increased on-time shipping to nearly 95 percent.

Take It to the Top

He advises any company planning to adopt SCM to set its sights high. "Do not go for anything less than a 50 percent improvement. Anything less and your organization can probably achieve that through refining its existing functional structure."

Such goals require high level support, he notes. "I cannot emphasize enough the importance of sponsorship and support from the top."

Support from top management can be achieved if the significant benefits of SCM can be clearly described. This was easier to sell to the president of our division than anything else," says Edward A. Siecienski, Logistics Planning Director, Lucent Technology. "It took just two

viewgraphs," to make the point in a presentation. With full authority to move ahead, Lucent sought to develop a true 3PL partnership, but one that would retain Lucent's autonomy to change partners in the future.

"This project is basically about EDI," he says. "Unless you want to turn over your company to your 3PL, you must develop an EDI strategy." EDI's open architecture permits later involvement of other 3PLs, should that be necessary.

Lucent ultimately selected Skyway on the basis of its ability to manage information. "Now customers and 3PLs realize it's not just about physical movement, but information movement," says Skyway's Charles Loundsbury.

To meet that need, Skyway has developed Concerto, a logistics management system designed to provide technology and operations capabilities that can shorten cycle times, improve cash flow, and increase customers satisfaction.

For the logistics manager facing choices about how to survive and prosper into the 21st century, there are strong reasons to become a supply chain management partner.

There are pressures to reduce inventory, lower costs, speed order handling, and even to justify the continued need for in-house logistics departments.

"This is the age of the never satisfied customer," is how SCM software provider Optum, Inc. President and CEO David Simbari puts it.

An even better reason to invest in SCM, though, is the tremendous potential for improving a company's overall competitive position, and for improving the logistics process. ■

► *About the author: Bill Fahrenwald has been a transportation marketing writer and communications consultant for over 20 years. He is vice-president of Lothair Inc. which specializes in providing marketing to the logistics industry. (www.lothair.com)*

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US Logistics Closing on Trillion Dollar Mark

What is logistics? The Council of Logistics Management defines it as "the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements."

How big is it? By one estimate, total logistics spending in the United States in 1997 was \$862 billion* (10.7 percent of the gross domestic product) including transportation, inventory carrying costs and administration. Worldwide, logistics costs are projected to be in the two trillion dollar range in 1999.

In the fast-growing third party logistics (3PL) sector, 1997 gross revenues were estimated at \$34.2 billion**, with 3PL software accounting for \$2.1 billion of those revenues. That software sector alone is expected to grow to some \$13.2 billion*** by 2002 (that's three years from now).

Sources: *Cass Logistics, **Armstrong & Associates, ***AMR Research

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Indiana has been home to some of America's greatest sports teams for more than a century. Maybe it's because Hoosiers are naturally competitive. Or maybe it's because the local fans are so supportive. Whatever the reason, teamwork is one of the



Indiana, USA

qualities that has made their state great. And it's definitely one of the reasons Indiana was chosen as the site of Toyota's major new U.S. vehicle manufacturing plant.

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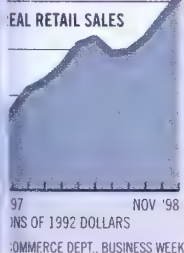
THE JINGLE OF CASH REGISTERS RINGS IN THE NEW YEAR

Spending shoppers will keep the economy buoyant into early 1999

U.S. ECONOMY

To the surprise of many analysts, the economy is ending much the same way as it began. Consumers are in a spending spree, to the holiday joy of retailers. Manufacturers are still struggling with weak exports, overall job markets remain strong. And despite economic growth of about 3.5% for the third straight month, inflation is still a no-show. All in all, the story of 1998 economy has been one of resilience in the face of many potential pitfalls, at home and abroad. While economists generally believe that the economy needs all the stamina it can muster in 1999, as domestic demand slows (page 82), the outlook in the months immediately ahead still looks fairly upbeat. Facing any foreign or domestic shocks to U.S. markets, the 1999 slowdown should develop gradually. It's because the latest data show that consumer spending has plenty of momentum (chart). They also show that housing is strong and that job growth and inflation are stoking households' buying power.

RETAIL SALES CONTINUE TO SOAR



Digging into the data on personal income reveals what's happening. Overall household income has grown a solid 3% in 1998, even after taking out taxes and correcting for inflation. But the wages-and-salaries component of that income—about three-fifths of the total—is soaring at twice that pace: What's more, the current 6% growth rate of real “take-home” income is double what it was three years ago. Historically, such rapid wage-and-salary growth has occurred only in the early stages of a recovery. These recent robust wage advances have been camouflaged by slow growth—only 1.9% a year—in the other two-fifths of the income pie: Lower rates have held down interest income. Strong job markets have held up unemployment benefits. And tighter welfare standards have cut the growth in transfer payments.

THE EXCEPTIONAL BUYING POWER of work checks, it shouldn't be surprising that spending has remained so strong. Retail sales in November rose 0.6%, and revised data for October show that they increased 1.2%, a bigger rise than first reported. The numbers suggest that real consumer spending on

goods and services for the entire fourth quarter will grow at an annual rate of around 5%. If so, overall growth in gross domestic product could end up quite strong.

Because of the energetic pace of retail spending, shopkeepers' inventories as Christmas approaches may well be skimpier than they would like. While the overall ratio of inventories to sales for all businesses—including manufacturers, wholesalers, and retailers—has been edging up during the past two years, the ratio for nonauto retailers alone continued to fall in October, hitting its lowest level in 17 years. That trend reveals why shoppers have had such a difficult time tracking down a Furby. It also means that stores' after-Christmas markdowns may be less generous than they have been in recent years.

Home-related goods continue to represent a big chunk of retail sales, and that demand is coming from a buoyant housing market. In December, the National Association of Home Builders' index, a composite of builders' assessments of sales and buyer traffic through model homes, remained at its record November level of 78% (chart).

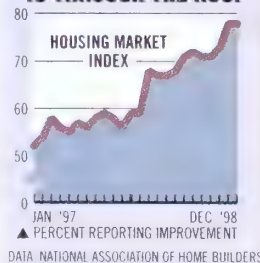
Builders were optimistic about both current sales and demand during the coming six months.

Indeed, despite an overall drop in housing starts in November, reflecting a large decline in the volatile apartment building category, builders broke ground on single-family homes at the fastest pace in nearly 15 years. Total starts fell 2.7% to an annual rate of 1.65 million, but single-family homes increased 5%, to 1.35 million. Mild November weather may have boosted building activity.

ANOTHER REASON WHY CONSUMERS may be spending more at the mall: They're spending less at the gas station and the grocery store—especially for key budget items. Low overall inflation is boosting buying power, and that trend should continue at least into early 1999.

Consumer prices for all goods and services in November rose by 0.2%, the same as the increase reported for October. Energy prices fell 1.6% and now

BUILDERS' OPTIMISM IS THROUGH THE ROOF



stand 9.2% less than their levels a year ago. And prices of meat and vegetables were also down in November. For the year, total consumer inflation is on track to rise 1.5%, slower than its 1.7% pace in 1997, and the stodgiest pace for any year since the oil-price collapse in 1986.

Exclude food and energy, however, and core inflation is showing a bit more of a pulse. Core prices were up 0.2% last month as well, but they will likely rise 2.4% this year, slightly more than their 2.2% climb in 1997. And producer prices for core finished goods are also rising a bit quicker. After no gain in 1997, they were up 1.3% in the 12 months ended in November.

AT THE START OF 1999, the price data will probably be skewed by the already-announced price hikes for tobacco products. But in general, inflation should remain tame for a while longer. A shift toward larger price markups will likely become noticeable when the dollar's recent slide halts the decline in import prices. That's because the competition from cheaper imported goods has prevented many U.S. manufacturers from raising their own prices.

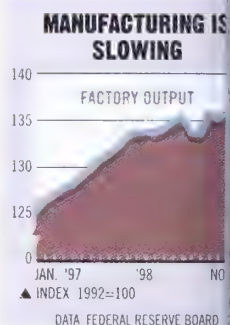
Relief from import price competition will come slowly, but the trade-weighted dollar's 10% decline since August already appears to have halted the fall in prices for foreign goods. After declining for 12 months in a row, nonoil import prices increased 0.1% in both Octo-

ber and November, although they are still down 3% from a year ago.

Meanwhile, manufacturers continue to suffer as the year draws to a close. Industrial production fell 0.1% in November, mainly reflecting a sharp drop in utility production due to the mild weather. Manufacturing output was flat in the month, and factory output barely grown since August (chart).

Moreover, factories in November were using only 79.8% of their production capacity, down from 80.2% in October. Except for the period this summer during the strike at General Motors Corp., that's the lowest rate in five years. With capacity having grown 5.6% during the past year, far faster than output, businesses have little reason to increase their capital spending in 1999.

That's why, barring any confidence-rattling event either at home or abroad, consumer spending is the only hope for continued, if slower, growth in the economy in 1999. That's because capital spending, housing, and foreign trade will not be providing much support. Heading into the new year, households show all the signs that they are up to the challenge.



MEXICO

WALLOPED BY CHEAP OIL

After months of haggling, Mexico's opposition-dominated Congress finally approved a controversial \$65 billion program to rescue the country's wobbly banks. But Mexico is not out of the woods yet: The price of Mexican crude, which accounts for more than 30% of the government's tax revenues, has dropped 50% in a year (chart). On average, the export price is down to \$7.10 a barrel.

Finance officials, who had calculated the country's 1999 budget of \$100 billion using oil at \$11 a barrel, are drastically cutting their spending plans. The budget will be the most austere in Mexico's history. Congress, which was to adjourn

on Dec. 15, scheduled a special session to approve a budget by yearend to avoid a disruption of government services.

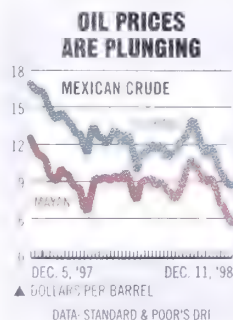
Despite the drop in oil prices, Mexican real gross domestic product probably expanded by an impressive 4.5% in 1998, boosted by a 7% rise in industrial activity. Until recently, officials insisted the economy would grow 3% in 1999. But now, most economists are predicting growth of just 2% to 2.5%.

Some of the slowdown will be the result of government policies. Forced to find new revenues to replace oil receipts, the government pushed through 15% hikes on phone service and gasoline and increased income

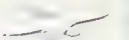
taxes on high earners. That is expected to push inflation above the target of 13% for 1999, eroding recent wage gains. Plus, the Central Bank tightened the money supply, pushing interest rates on 28-day Cetes treasury bills to 35%, putting a damper on many companies' investment plans.

With the stock market down 40% in dollar terms so far in 1998, officials are aware that Mexico risks a fallout from concerns over Brazil and Venezuela's stability. So they're set on keeping the 1999 budget deficit at just under 1.5% of GDP. That means more austerity. But with memories of the 1994 devaluation fresh in people's minds, officials are loath to show signs of fiscal irresponsibility in the year leading up to presidential elections in July, 2000.

By Geri Smith in Mexico City



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does as much
for its frequent flyers.
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FILLING THE NEED FOR SPEED

The scramble is on to supply fatter data pipelines to the home

When Ken Kasner moved to Centerville, Va., from upstate New York last year, the biggest sacrifice his family had to make was leaving behind the thick coaxial cable for his computer. A high-speed "broadband" Internet connection via cable modem—a service called Roadrunner—had changed Kasner's life. Instead of watching TV, the systems engineer would spend hours nightly playing computer games with his five-year-old daughter, doing research, and clicking through Web sites just as quickly as TV couch potatoes channel-surf. "We always kept the Internet on, like the radio," says Kasner. He's already preregistered with Roadrunner Computer Systems Inc. to resume the service when it arrives in Virginia next year.

What's good for the Kasners is good for the nation—at least when it comes to getting the most out of electronic commerce, which many economists view as a linchpin of America's high-tech future. "If we can get broadband to the home faster, E-commerce will grow faster," says Federal Communications Commission Chairman William E. Kennard. "And American business will stay on the cutting edge of this trend world-

wide." Adds Michael Malaga, CEO of broadband startup NorthPoint Communications Inc. in San Francisco: "Between now and the millennium, broadband access to the Internet will become as important as electricity was at the turn of the century."

For that prediction to come true, a lot has to happen in 1999. At the moment, the broadband Internet access that the Kasners learned to love is not available to the vast majority of American homes. And, as millions of consumers try to shop at Amazon.com and other online outposts during this first truly online Christmas, cybertraffic over conventional phone lines has slowed to a crawl—spawning the catchphrase "shop till you get dropped." If that bottleneck persists, the development of E-commerce could be crimped.

But there's reason to believe that the

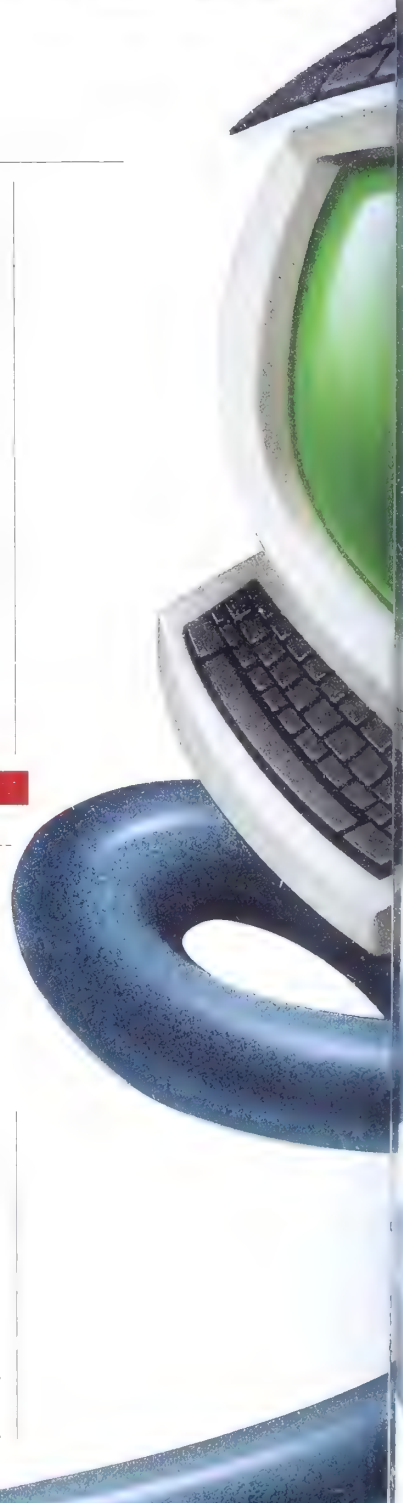
TELEPHONE VS. CABLE

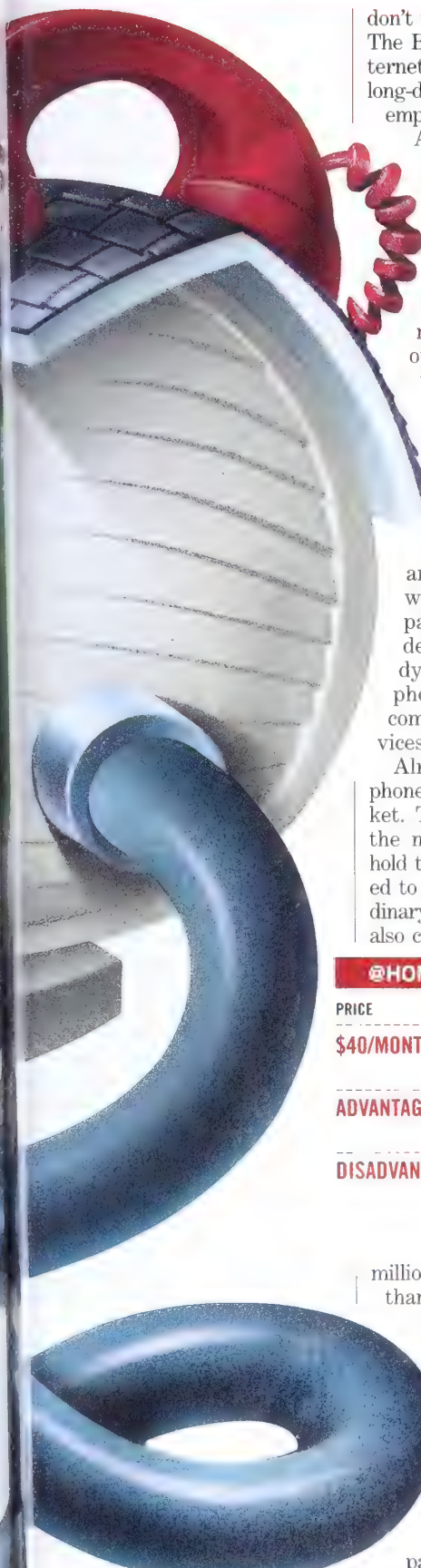
GTE'S DSL SERVICE

| PRICE | SPEED |
|---------------------|---|
| \$60/MONTH | 256K into the home
64K back |
| ADVANTAGE | Easy to install and each home has its own pipe |
| DISADVANTAGE | Home must be within three miles of central switching office |

new year will indeed bring a huge advance in the availability of broadband. From Silicon Valley to Washington, technology experts, business execs, and policymakers are swarming on the problem. On Jan. 28, the FCC is expected to start laying down rules for how the cable operators and their rivals, the phone companies, will deploy these new services. And not a minute too soon.

The industry, meanwhile, is pounding on the FCC's doors with urgent demands. Cable companies, which are spending \$33 billion to gear up for broadband,





don't want their new services regulated. The Bells say they can't unleash fast Internet services without getting into the long-distance market. They also want exemption from rules in the 1996 Telecom Act that could tie their hands in these new businesses. Meanwhile, America Online Inc. has told regulators it must have access to the cable operators' high-speed pipes on reasonable terms.

AT&T and its pending merger partner, cable giant Tele-Communications Inc. (TCI), aren't eager to open up their lines to AOL; they want to give their own Internet service first dibs on their fast cable network. Behind the scenes, however, AOL and TCI are trying to negotiate an amicable arrangement.

The FCC is trying hard to create policies to speed up the arrival of broadband service—but without giving any of the players a particular edge. "We're working desperately to create a competitive dynamic so the cable, wireless, and phone industries work up a sweat competing to deliver broadband services to the home," Kennard says.

Already, cable operators and local phone companies are vying in the market. The telcos are revving up, but in the next two years, cable is likely to hold the lead. Coaxial cable is better suited to carrying high-speed traffic than ordinary phone wires, and the services are also cheaper (table). Right now, of the 25

@HOME'S CABLE MODEM SERVICE

| PRICE | SPEED |
|---------------------|---|
| \$40/MONTH | 1.5 to 3 Mb into the home
128K back |
| ADVANTAGE | High download speeds at a low price |
| DISADVANTAGE | Services slow if many people in a neighborhood log on |

million American households online, less than 500,000 have the cable modems that are needed to get data traffic over cable. The TCI-controlled @Home network—the largest cable Internet service—has only 210,000 customers. But it's growing 40% to 50% a quarter. Time Warner Inc.-controlled Roadrunner, with 160,000 subscribers, adds 4,000 every week.

At the same time, phone companies are bringing out a technology, digital subscriber line, or DSL, that can

send broadband traffic over ordinary wires. The industry will soon standardize a low-cost DSL modem, which Compaq Computer Corp. and others plan to build into some PCs. As a result, says Dataquest, the ranks of DSL subscribers could zoom from just 50,000 now to 5 million worldwide by 2002, putting the telcos and cable companies in a dead heat.

HOBSON'S CHOICE. But the phone companies say upcoming FCC rules could stall their plans. Concerned about the Bells' potential clout in local Internet access, regulators are floating a choice: Resell your DSL service to rivals at a discount or spin it off to subsidiaries. The Bells hate this idea and have enlisted powerful allies in the computer industry to lobby Congress against it. But with Internet traffic eclipsing voice on phone networks this year, telcos can't afford to dawdle. Ameritech Corp., for one, has opted to set up a subsidiary. If a phone company doesn't get into data now, says Ameritech CEO Richard C. Notebaert, "you're going to miss the wagon."

Perhaps the biggest indication that broadband is coming of age is cybergiant America Online's entry into the race. AOL, which offers its service mostly via slow dial-up modems now, needs to boost speed for 14 million subscribers or it could lose customers to the fast Internet service offered by @Home and Roadrunner. AOL has been engaged in DSL trials since April with GTE, Pacific Bell, US West, Bell Atlantic, and BellSouth.

But phone partners aren't enough for the online titan. It's battling to get a better deal with the cable operators. Right now, TCI sells the @Home service along with the broadband connection for \$40 a month. Any user who wants AOL must pay an extra \$9.95 a month on top of that. AOL complains that TCI's bundling of Internet access with @Home puts other online services at a disadvantage. It has asked the FCC to require AT&T-TCI to sell its high-speed service at wholesale rates to AOL and to other Internet companies. "We're perfectly prepared to compete with @Home on the merits," says AOL General Counsel George Vradenburg III.

The FCC may choose not to decide the issue when it reviews the proposed \$48 billion AT&T-TCI merger. Instead, it could address it this January, when it begins exploring rules for the entire cable industry. AT&T and TCI say the AOL

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request jeopardizes their deal by undercutting the returns on the \$1.8 billion invested to upgrade TCI's cable plants for speedy data transport. "No one will make these investments if they're required to make it available for anyone else that comes along," says AT&T Senior Vice-President James W. Cicconi.

Telcos also face big investments and big risks. And DSL technology has some snags, says Yankee Group analyst Jim Wahl, including not working over long

distances. But Americans don't much care if their high-speed pipe is a TV cable or a phone wire. Nor do the digerati, it seems. At Microsoft Corp., which has over a billion dollars invested in fast-cable assets, engineers praise GTE's budding DSL service which they use to log onto the office network from home.

In the same way, mainstream Americans will welcome competing services in an expanding market. Satellite and digital TV broadcasters, among others, are

also scrambling to provide fast Net access. Don't think of the broadband title as a boxing match, advises R. Holland, CEO of Allegiance Telecom. It's more like a golf game, where everybody is trying to get the score. The more companies enter the fray, the more likely that consumers like the Kasners will emerge the victors.

By Catherine Yang in Washington with Ronald Grover in Los Angeles and Andy Reinhardt in San Mateo, Calif.

NOW, BEAM UP SOME CUSTOMERS

The cable industry may be focused on its competition with phone companies to wire homes for high-speed Internet traffic. But it shouldn't take its eye off its core business: Direct broadcast satellite—long an unfulfilled threat—now seems to have a new lease on life.

That's largely because of consolidation in the business that leaves two top players—EchoStar Communications

Corp. and Hughes Electronics Corp.'s DirectTV—in an escalating marketing battle. Over the past year, EchoStar has roared back from near-bankruptcy. It has refilled its coffers, acquired satellite capacity from Rupert Murdoch's News Corp., and turned the market on its head by offering free hardware to consumers who sign up for one year's programming at \$48.98 a month. In November, EchoStar picked up 101,000 new subscribers; DirectTV landed 110,000.

ROUND TWO. With EchoStar breathing down its neck, DirectTV is reassessing its strategy for staying on top. In the next phase, the winner won't be determined by who could deploy the most capital to build up a satellite infrastructure. Hughes, a unit of General Motors Corp., probably would have won that. Now, the competition is shifting to marketing—the battle for more customers.

On Dec. 14, DirectTV took up the

challenge by acquiring longtime partner U.S. Satellite Broadcasting Co. for \$1.3 billion. This gave DirectTV 200,000 new subscribers and a better programming package that includes Home Box Office and Showtime. Consolidating will save up to \$180 million annually once the deal closes, probably by mid 1999.

DirectTV also plans a Spanish-language service with close to 20 channels targeted at 6 to 7 million households. "The battle is now fought at retail, and [winning] new subscribers," says Stanley E. Hubbard, president and CEO of USSB.

And the consolidation is not over. PrimeStar Inc., which is owned by

dred million dollars apart. Still, as Michael T. Smith, CEO of Hughes, notes: "Anybody in the subscriber acquisition business would say, 'Boy, we'd love to get them.'"

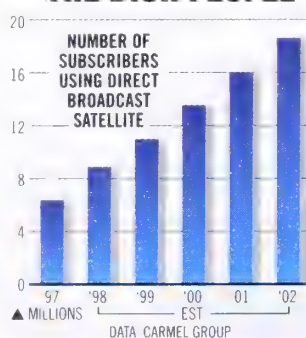
Meanwhile, EchoStar—which has managed to get its dishes into Sears, Roebuck and Sam's Club stores—has put a "bounty" on the heads of PrimeStar subscribers, offering deal-

ers more than \$200 dollars to convert them. The result, says Vijay Jayant, managing director of Bear Stearns & Co.: EchoStar could overtake DirectTV in new subscriber acquisition beginning in the year 2000. And those who would likely be losers for cable companies



EARTH STATION: From infrastructure, the focus shifts to marketing

THE DISH PEOPLE



By Steven V. Br...
in Los Angeles



COMMUNICATIONS

AT&T'S WIRELESS PATH LOCAL SERVICE

"Project Angel" will back up Ma Bell's cable forays

of the first moves C. Michael Armstrong made on arrival at AT&T late 1997 was to shelve an ambition to use a wireless technology, named Project Angel, for local service. Armstrong, a hard-charging former Bell and Hughes Electronics Corp. executive, bought the system, which would cost AT&T \$1,100 per household to be a money-loser. Instead, he drew his attention to cable TV as a way to enter the local phone market. Then, he struck a deal to buy Telecommunications Inc. for \$48 billion. Project Angel has risen again. Bell and its affiliates only cover a third of the country, Armstrong is looking for ways to compete against Bell Corp. and the other Baby Bells. The remaining 70 million U.S. households that he is abandoning cable remains AT&T's primary path to local markets. In fact, AT&T has

been negotiating—unsuccessfully so far—with Time Warner Inc. to offer phone service over Time Warner's cable network, which dominates New York. The economics, at \$400 to \$500 per home, are more attractive than wireless.

But Angel's costs have plummeted—to about \$700 per household for two phone lines and high-speed Internet access. So, given the difficulty of landing cable deals, Angel has become a viable option—and is scheduled to roll out commercially in at least one city by the first quarter of 1999. "It's working and

AT&T is seriously
considering a launch
in New York

passing technical tests," says Daniel Hesse, CEO of AT&T Wireless. "When we [deploy it] has more to do with marketing issues than with technical issues."

Where will Angel land? Think Big Apple. Although Hesse won't discuss it, AT&T executives are seriously considering launching the commercial trial in New York, according to one insider and two sources close to the company. The reason is strategic: Bell Atlantic is likely to get approval in 1999 to provide long-distance service to New York residents. What's more, New York-based Bell is rolling out a technology for high-speed Net access called digital subscriber line (DSL) (page 50). AT&T wants to be able to offer its customers the same bundle of services as Bell Atlantic.

Bell Atlantic says it isn't worried. "[Angel] is not what customers are looking for," says Lawrence Babbio, Bell Atlantic's president. "I can get to a home for half the cost with DSL."

PIZZA-BOX SHAPE. AT&T may still launch Angel elsewhere. Other cities under consideration are Boston, Dallas, and Seattle. Dallas is considered the most likely: A Texas foray could serve as a savvy political move to demonstrate the benefits of local competition on the home turf of rival SBC Communications Inc., considered the most aggressive Bell.

Here's how the Angel technology works: A pizza-box-shaped receiver is placed on the side of a customer's house, and it sends radio waves carrying voice or data traffic to an antenna that can be located on a building or utility pole. From the antenna, the signals are sent to an AT&T switching center that routes calls into the local network or AT&T's national system. The technology can also deliver data transmission speeds of up to 1 megabit per second—almost 20 times as fast as today's 56-kilobit-per-second modems. "There really isn't another technology that lets you compete as quickly and easily," says Matthew Desch, wireless chief at Northern Telecom.

While AT&T owns the Angel technology and is manufacturing the equipment in Redmond, Wash., it probably won't hold on to it. AT&T got out of the business of making telecom gear when it spun off Lucent Technologies Inc. in 1996—and sources close to the company say it is likely to sell or license the technology to a telecom maker, such as Ericsson, Lucent, or even Germany's Robert Bosch.

Without doubt, AT&T will try to form further partnerships with cable companies such as Time Warner. Eventually, Armstrong says he wants to own or use cable networks to cover 60% of U.S. households. For other parts of the country, wireless technology will be Armstrong's guardian angel.

By Peter Elstrom in New York

COMMENTARY

By Owen Ullmann

FORGET SAVING, AMERICA. YOUR JOB IS TO SPEND

I have a confession: I'm not much of a saver anymore. Sure, I put enough into my 401(k) to get the maximum match from my employer. But I used to sock away another 10% of my paycheck for my kids' college, emergencies, and big-ticket purchases. I don't anymore: The stock market does my saving for me.

Multiply that mindset by tens of millions of consumers, and you grasp why the nation's already low personal savings

should hit \$1.2 trillion in 1998, up 59% from 1990. And the strong economy has left most states with sizable surpluses and helped Uncle Sam climb out of the red for the first time in 30 years. Indeed, when all domestic sources of savings are added up, the national savings rate for 1998 may hit 17.4%, up from 14.4% in 1993.

tions does not. The nonretirement savings I've invested have doubled over four years without my adding cent. Yet the increase isn't captured in the savings rate. And when I spend some of my gains, I'll push the savings rate down.

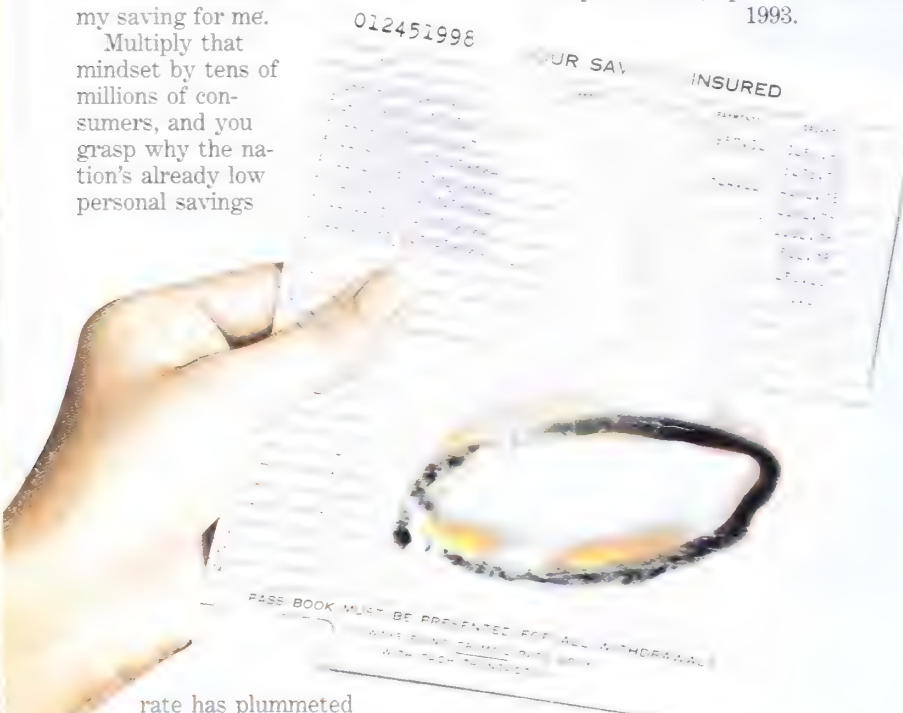
That's precisely what's happening as millions of investors cash in. Wall Street's runup has pushed household net worth to a record six times income. No wonder flush consumers want to spend some of that green. "It's perfectly rational behavior," says DRI's Wyss. If all the realized gains were counted as savings, the personal savings rate this year would approach 6%. It's still well below the comparable rate of 10% that held up for 20 years before 1985, but a lot better than the official figure.

BIG SPENDERS. So should American keep spending and let the market save for them? Over the long term, no. Wall Street won't post big gains forever, business and government won't always be so liquid, and foreign money may find other homes.

But for now, the U.S. is—and the world needs—a nation of big spenders. "You have a weak global economy kept afloat by Americans who are spending like mad," says Edward E. Yardeni, chief economist at Deutsche Bank Securities Inc. "If those spending yuppies become frugal yuppies, look out." Michael R. Paslawskyj, chief economist at CIT Group Inc. of Livingston, N.J., warns that a downturn in stocks could abruptly turn Americans into savers, pushing the U.S. into a recession. His advice: Don't save too much right away. "Do it gradually."

Fine by me. After hearing economists scold us Americans for being profiteering materialists, it's nice to be told to keep spending. I'm off to the mall to do my part for the world economy.

Senior Writer Ullmann recently bought a new car and dining room furnishings.



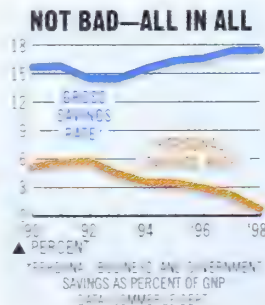
rate has plummeted this year to 0.6% of disposable income. During September and October, the government reports, the rate actually dipped below zero—unheard of since the Great Depression.

That statistic might unnervify you. But don't worry: The U.S. is awash in savings from other sources, mainly business. What's more, the meteoric rise in stock values has given consumers a huge pot of money to tap without having to put more aside. "U.S. households are the richest ever," proclaims David A. Wyss, chief economist at Standard & Poor's DRI. "They figure, 'We're so rich, we don't have to save.'"

At the same time, savings by business and government have more than made up the slack in personal savings. Thanks to record profit gains, retained earnings by business

Money is also flooding in from overseas—a record net investment of \$250 billion, much of it from Asia, where savers are looking for safe haven. The bottom line for the U.S.: "There's no shortage of investment capital," says Allen L. Sinai, CEO of Primark Decision Economics Inc. "The U.S. is cash-rich."

On top of all this, the personal savings stats don't really show where individuals stand financially. Although contributions to regular savings and retirement accounts—plus employer matches—count as personal savings, the rise in value of those contribu-



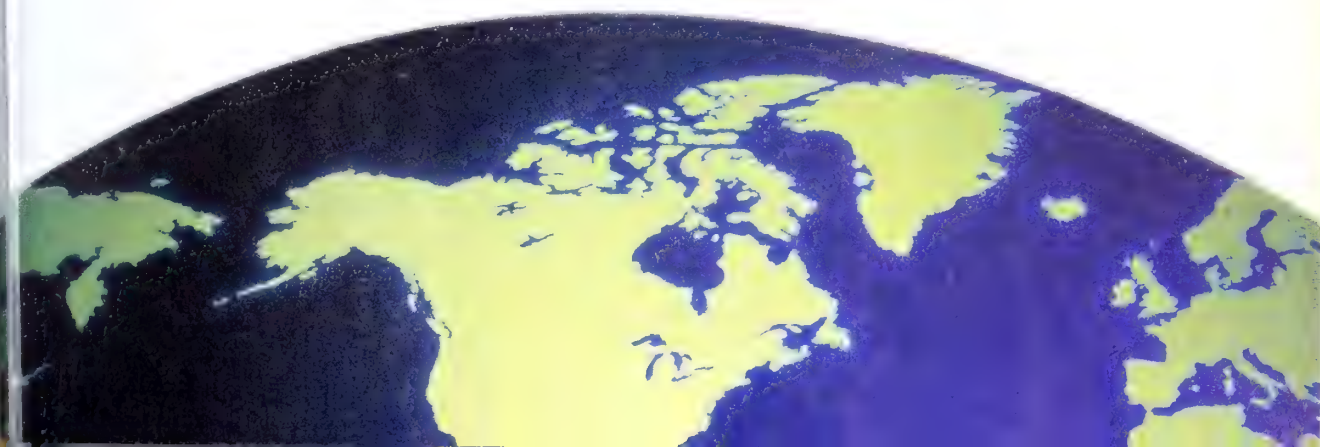
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CONTENDERS: BMW's beefy X5 (left) and Ford's Mazda-based S

DETROIT

THE BIG THREE ARE IN THE CATCH-UP LANE

Detroit lags way behind rivals in the small-SUV market

When the auto industry converges on the Cobo Center for the Detroit Auto Show on Jan. 3, the big news is expected to be offerings by Chrysler, Ford, and General Motors in the latest hybrid-vehicle market. The new sensation: sport-utility vehicles built on car platforms—not from pickups.

These smaller SUVs may indeed be showstoppers. But outside the hall, they're just plain late. Foreign competitors, notably the Japanese, got to this market first. Even now, three years after Toyota's RAV4 got the trend rolling, all Detroit has to offer is a slew of thinly disguised "concept" models that won't be ready for the showroom until 2000. Says Michael Robinet, managing director of consultants CSM Forecasting: "The Big Three are certainly last to the party."

LONG LINEUP. The race isn't over, but there's no doubt Ford, General Motors, and Chrysler—now merged with Daimler-Benz—will have to scramble to defend their turf in an SUV market that they invented. To do that, they must generate some excitement with these models.

The companies aren't talking, but analysts and insiders say there's a long lineup. First, DaimlerChrysler is expected to unveil a Neon-based sport-utility wagon, as well as a fancier SUV based on the Chrysler 300M luxury car. GM, analysts say, will show off three new crossovers: the Chevrolet Nomad, based on the Camaro; the Pontiac Aztec; and the Oldsmobile Recon. Ford Motor

Co. is also expected to preview its 2001 crossover, based on Mazda Motor Corp.'s 626 sedan, either at the Detroit show or one of the other auto shows this winter.

All these models capitalize on the blurring between cars and trucks started with the original SUVs. The new crossovers defy simple definitions, combining the roominess and rugged image of SUVs with the smooth ride, better handling, and fuel efficiency of sedans. But whatever you do, don't call them station wagons. These are for consumers who still want to be part of the boys club of SUV users—if only in the junior league.

Will they catch on? GM North Ameri-

ca President Ronald L. Zarrella is predicting "explosive growth." Sales could swell from just 60,000 units in 1991 to some 564,000 in 2003, predicts J. Power & Associates Inc. Most of the growth in SUVs going forward, says DaimlerChrysler Co-Chairman Robert J. Eaton, "will be in the car-based market."

The new trend has the added benefit of helping Detroit could solve a tickle problem: SUVs are gas guzzlers and polluters. Their relatively efficient car-based brethren are a gesture by lawmakers to help satisfy federal standards for trucks on fuel economy.

SUBARU, TOO. The Japanese got a jump on the car-based SUV market because they had to: Lacking heavy-duty truck platforms from which to build the SUVs that Americans were clamoring for, they reconfigured popular cars to make them more trucklike. The RAV4 was followed by Honda Motor's CR-V, Subaru's Forester and Outback, and in 1998, the high-end Lexus RX300. European automakers got into the act, too, with the Mercedes ML320 in 1997. BMW will join in with the X5, a beefier, four-wheel-drive version of its 5-series wagon, which also will be unveiled at the Detroit show.

Domestic auto makers insist they haven't been asleep at the wheel. Raking in profits from their big truck-based SUVs, they're just now getting around to developing smaller, more carlike versions. Ford will likely be in 2000 with the Mazda-based SUV, codenamed U204.

GM has the most catching up to do, analysts say, although the auto maker has a half-dozen crossover SUVs in its pipeline, including a small-car-based one for Saturn. For its top-end Cadillac brand, it will offer a model based on the next-generation Catera sedan.

With all these new models on the horizon, can a traffic jam be far off? In 2005, analysts bet as many as 30 different car-based SUVs will glut the market. Now, if only the industry can figure out what to call them.

By Joann Muller in De

HALF CAR, HALF SUV

ON THE ROAD NOW

- TOYOTA RAV4
- MERCEDES ML320
- HONDA CR-V
- LEXUS RX300
- SUBARU FORESTER AND OUTBACK

COMING SOON

- BMW X5
- DAIMLERCHRYSLER (based on the Neon small car)
- FORD (based on the Mazda 626)
- SATURN (based on the next Chevrolet Cavalier/Pontiac Sunfire)
- CHEVROLET (based on the Camaro)
- MITSUBISHI (based on the Gallant)

DATA: BUSINESS WEEK

What a laptop can do.

1. Get e-mail. 2. Send e-mail.
3. Search the Net. 4. Prepare memos.
5. Check appointments and contacts.
6. Set up a new derivative pricing model.
7. Put together a 3D animated short film.
8. Lay out the company newsletter.
9. Analyze data from radio telescopes.
10. Edit digital video.
11. Design a new kitchen.
12. Develop new software.
13. Develop new CD-ROMs.
14. Retouch swimsuit photos.
15. Play photo-realistic 3D video games.
16. Assist with scientific visualization.
17. Play back audio CD.
18. Expedite numerical analysis.
19. Do mail merges for the high school reunion (unless you went to a really small high school).
20. Aid in digital signal processor design.
21. Do database programming.
22. Use lots of floppy disks.
23. File income tax returns.
24. Composite digital video.
25. Author virtual reality.
26. Store a large number of files.
27. Connect to a large number of external storage devices.
28. Play educational CD-ROMs.
29. Conduct virtual reality demonstrations.
30. Balance the checkbook for a

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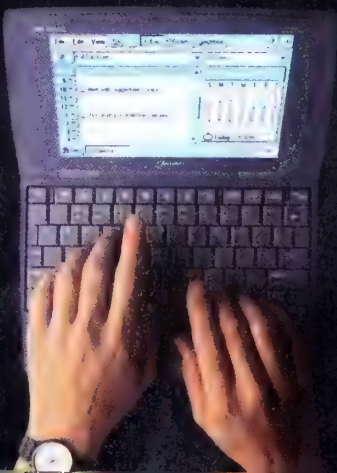


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AIRLINES

DOES TWA NEED A NEW CAPTAIN?

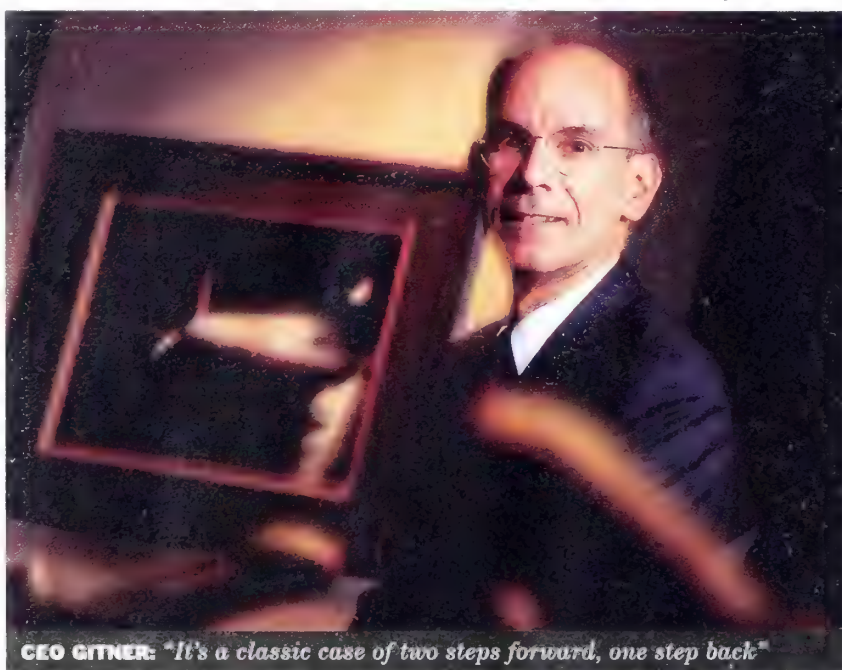
After strategy misfires, labor wants management replaced

It has been the best year for U.S. airlines since deregulation arrived in 1978. With a booming economy driving demand and low oil prices cutting costs, airline after airline will report record earnings. But not TWA.

Trans World Airlines Inc. will actually lose money in 1998. And the International Association of Machinists & Aerospace Workers (IAM), which represents 75% of TWA employees, who also own 14% of the company, is fed up. The IAM is calling for the resignation of both Chief Executive Gerald Gitner and President William F. Compton, noting that two years after they took office, the airline remains unprofitable. The IAM has also asked federal mediators to declare a stalemate in 18-month-old contract talks and start the clock toward a strike deadline. Gitner dismisses the threats: "We're in a stage of rhetoric now," he says.

UNFILLED PLANES. TWA's projected 1998 loss scuttles the hopes of analysts and the airline that this year would break a string of 10 losing years. All eyes are now on TWA's fourth-quarter results, due to be announced shortly after the New Year. Analysts are predicting a loss of around \$30 million. Coming in below that could boost the IAM's calls for a coup. Meanwhile, TWA shares have already fallen 50%, to less than \$6, since July.

TWA is reeling from a bad bet on yield management—the art of finding the mix of fares that most profitably fills planes. Last summer, TWA focused too heavily on high-paying corporate road warriors and didn't sell enough discounted seats to vacationers. The result: empty seats and a \$5 million loss in the third quarter, the most profitable in airline history.



CEO GITNER: "It's a classic case of two steps forward, one step back"

Such gaffes convinced one prominent TWA investor to bail out. The Burr Group, a Ridgefield (Conn.) investment firm that includes Don Burr, who founded PeopleExpress with Gitner in the '80s, sold its 1.5% stake in TWA earlier this year. "They've had two years to fix the place, yet they still don't seem to be able to use their yield management system effectively," says Cameron Burr, Don's son and a partner at The Burr Group.

Gitner says he's "disappointed" over the third-quarter problems—but insists that TWA is on the comeback trail. "We're going through a massive transformation," he says. "It's a classic case of two steps forward, one step back."

A key sign: On Dec. 9, TWA announced an order for 125 Airbus Industrie and Boeing Co. planes for its aging fleet. By the end of '99, 42% of the carrier's

fleet will be less than four years old, allowing the company to operate more efficiently. The strategy is to use better service to overcome a small fleet and a schedule that is less convenient than rivals'. Already, TWA has expanded its first-class sections and shored up a ballooning sheet that former owner Carl Icahn left in a shambles. And TWA has led the industry in on-time performance for the last 12 months.

But the carrier still losing more than it wins. Take the labor situation. TWA's top flight attendants earn a quarter less than the industry average and want a huge boost. Talks with management ceased on Dec. 1 and will resume in early 1999. Both sides are awaiting a federal appeals court ruling on whether TWA can pay \$24 million in back wages.

On Dec. 8, outside a board meeting in St. Louis, flight attendants, passenger service workers, and mechanics held a rally to demand the ouster of Gitner and Compton. "Saying they're deeply disappointed doesn't do it anymore," says Sherry Cooper, an IAM leader who sits on TWA's board.

Other directors are encouraged by progress. "These guys have done a tremendous amount of work," says board member retired General Merrill A. McPeak, citing the on-time rankings and improved cash flow. McPeak says it's vital the carrier to earn money in 1999: "I'm impatient," he says. That will be a challenge, since the airline is already shaping up to be tougher one for the industry. "If TWA isn't earning money now," says Tom Barkin, co-lead of McKinsey & Co.'s advisory practice, "you've got to wonder what the financial earning power of its network is." York investors will wait till then.

By David Leonhardt
in Chicago

TWA: Following The Fleet

1998 projected net income of U.S. carriers, ranked by miles flown

| | \$ IN BILLIONS |
|--------------|----------------|
| UNITED* | 0.76 |
| AMERICAN* | 1.4 |
| DELTA* | 1.1 |
| NORTHWEST | -0.12 |
| CONTINENTAL* | 0.47 |
| US AIRWAYS | 0.55 |
| SOUTHWEST* | 0.43 |
| TWA | -0.09 |

*Denotes record profit

SOURCE: PRINCEWEBBER INC.

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COMMENTARY

By Stan Crock

HIGH-TECH EXPORTS: SIMPLE STEPS WILL PROTECT THE U.S.

To hear Republicans tell it, the Clinton Administration has virtually committed treason by opening the floodgates to high-tech exports. And their rhetoric has only hardened as allegations pile up about how China set out to influence sales of high-tech gear through illegal campaign contributions and obtained rocket-launch knowhow via administration-sanctioned satellite sales.

As always, the truth is more complicated. But before the truth emerges, U.S. export policy will likely be set on a new, restrictive course. Under congressional pressure, the State Dept. must tell lawmakers by

regime. First, government rules must be technologically current. At the Commerce Dept., which handles licensing for exports of computer hardware and machine tools, licenses are still required for sales of computers that perform as few as 2,000 MTOPS (millions of theoretical operations per second). That covers such basic gear as servers used for E-mail systems.

QUICKER ACTION. Next, export applications should be handled more quickly. Since it is likely that Congress will expand the State Dept.'s oversight, State must operate with deadlines similar to, though probably slightly longer than, Commerce's 90-day limit.

At State, which Congress recently gave authority over satellite sales, reviews can take more than a year.

That lets foreign competitors wrest business from U.S. companies.

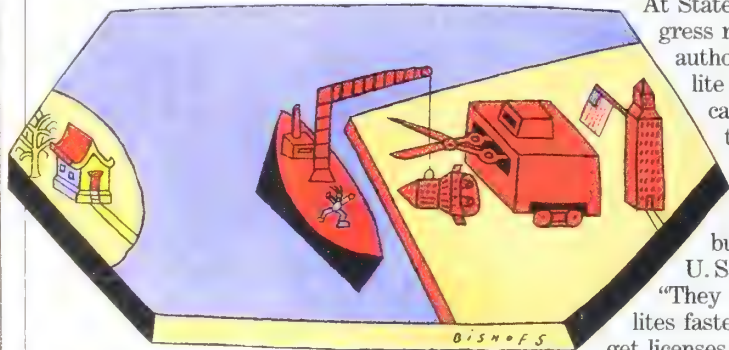
"They can build satellites faster than we can get licenses," gripes John

W. Douglas, president of Aerospace Industries Assn. State also should issue blanket approvals for sales of certain goods to specified countries when justified. Why, for instance, should direct broadcast satellites destined for Germany get stuck in the bottleneck?

Finally, China-phobia must not dictate policy. Congress should mull separate rules for China. This would insulate the broader discussion over export controls from the charged debate over China.

Partisanship makes finding a balance between national security and commercial needs difficult. Export controls have become another weapon in congressional attacks on the President. But to let such sniping hamper creation of rational export controls threatens corporate prosperity and the nation's security.

Crock covers the defense industry for BUSINESS WEEK in Washington.



Jan. 1 how it will tighten rules for commercial satellite exports. And regardless of what is said, industry sources predict that soon after, a House panel probing technology transfers to China will call for even stricter rules—both on satellites and computers—to ensure that technology with military potential doesn't fall into the wrong hands. "We've become a whipping boy," fumes Edward J. Black, president of the Computer & Communications Industry Assn.

LITTLE BENEFIT. The danger is that the pendulum may be swinging too far, jeopardizing much more than the current \$30 billion a year in sales that are categorized as munitions or dual-use equipment. Overly restrictive export policy could hobble America's most dynamic industries, with little benefit to national defense.

Instead of the sea change in policy that Congress wants, a few simple fixes could add up to a sensible export



RETAILING

THE SOFTEST SIDE OF SEARS

Discounters and high-fashion rivals have it in a squeeze

Sears, Roebuck & Co.'s CEO Arthur C. Martinez may be short on Christmas cheer this year. Annual reports report robust sales growth, but sales numbers have dipped for four months. On Dec. 2, Sears warned that 1998 sales would be below forecasts, the steepest such warning in three months. Shares have tumbled from a February high of nearly 64 to around 41—a drop of 35%. Is Sears' turnaround stalled?

Not according to Martinez. The former Saks Fifth Avenue executive, who took over in 1995, has transformed Sears from a relic into a retailing powerhouse. He closed outlets, bagged the Sears catalog, and, with the "Softer Side of Sears" campaign, made Sears popular like other department stores: fewer and more apparel. The results: months of double-digit sales growth. **LOSING STEAM.** But Martinez hit a speed bump in 1997, when bad credit accounts ballooned, raising questions about the link between strong sales and easy credit. When Sears tightened credit, sales slowed.

Now, the problem seems to be the Softer Side strategy, which is losing steam in the face of competition from both discounters and more fashionable stores. Sears "is back in that squeeze between the traditional department

Changing Jobs?

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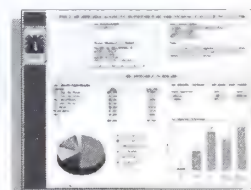
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store and the discounter that offers better value," says Richard L. Church, a retail analyst at Salomon Smith Barney. "It's a hard place to be."

Martinez says the way out is to tilt toward discounters. "Kohls, Target, and Wal-Mart have done a better job of improving product and are more credible on pricing," he says. The softer-side focus on apparel "restored the credibility of Sears" for female customers, he says. Over five years, revenue from apparel rose from \$4 billion to \$9 billion. But now, Sears must "send a stronger value message to our customer," he adds.

That message, Martinez predicts, will produce double-digit earnings growth by the end of 1999. But analysts are wary. Steven Kernkraut of Bear Stearns Cos. warns: "They are going to have to strike the right balance." Other stores have found that difficult. Montgomery Ward & Co., now trying to work its way out of bankruptcy, learned it couldn't beat discounters at their own game. So, too, did Venture Stores Inc., which went into bankruptcy in 1998. "Sears can't be everything to everybody," says Maxwell Sroge, a retail consultant who works with Sears.

EXODUS. Sears isn't giving up its fashion ambitions. On Oct. 5, it announced a plan to sell merchandise from Benetton Group, which has only sold through its own stores in the past.

Complicating Martinez' plans is the loss of top talent from his turnaround team. On Dec. 4, John H. Costello, creator of the Softer Side ads, left for Republic Industries Inc.'s AutoNation USA—the sixth key executive to depart this year. After two years of lackluster performance, Sears' raises and bonuses are down. Concedes Martinez, who got no 1997 bonus: "They all left for significantly better situations than I could offer in the short term."

When will the situation improve? There are some good signs: Old standbys such as Craftsman tools and Kenmore appliances are climbing. And Martinez is counting on services such as pest control, appliance repair, and carpet cleaning to improve Sears' outlook. These new businesses, however, don't yet contribute much to earnings, which are now expected to come in at \$1.27 billion. "They have been talking about home services for the last three years," says Kernkraut. "It would be great if it works, but they haven't been able to do it yet."

Ever the optimist, Martinez is looking forward to 1999 and the payoff from his new value strategy. Investors can only hope it works.

By De'Ann Weimer in Chicago

MANAGING

A TELECOM VET TAKES ON EDS

Can dealmaker Brown repeat his Cable & Wireless success?

He doesn't officially start his new job until Jan. 15—but Richard H. "Dick" Brown is already hard at work for Electronic Data Systems Corp. On Dec. 11, the day after being named CEO, he started with a teleconference for a cheering crowd of EDS employees at the Plano (Tex.) headquarters. That afternoon,

than 10% since the announcement. Brown refashioned Cable & Wireless through 21 deals over 29 months in a crusade to shake up a hidebound organization. At C&W, he replaced 65 of the top 100 execs and instituted a reward system that ranked employees from best to worst. "Leaders get the behavior they tolerate," says Brown, 51.

At EDS, Brown will likely see through some 45 "strategic business units" and thousands of contracts, making or restructuring the losers. And almost certainly make acquisitions to beef up EDS' capabilities in Net systems and electronic commerce. He's also expected to overhaul EDS' management. Performance has been sorely lacking since EDS' spin-off from General Motors.

EDS' NEW CHIEF

RICHARD H. BROWN

BORN June 3, 1947, New Brunswick, N.J.

EDUCATION B.S., communications, Ohio University

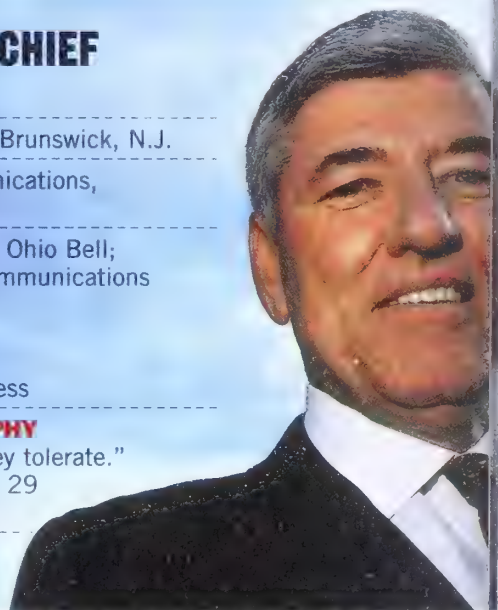
EXPERIENCE 1969-1981, Ohio Bell; 1981-1990, United Telecommunications (later Sprint); 1990-1995, Ameritech; 1995-1996, H&R Block; 1996-1998, Cable & Wireless

MANAGEMENT PHILOSOPHY

"Leaders get the results they tolerate."

Major dealmaker; did 21 in 29 months at Cable & Wireless

FAMILY Married, two children



Brown, still CEO of Cable & Wireless PLC, made a sales call for EDS in London.

Brown, who earned a reputation as a rapid-fire dealmaker at C&W, may also be planning deals for EDS. On Dec. 15, alliance talks between EDS and MCI WorldCom surfaced. They are said to be working out plans to sell an array of services together. As part of the deal, EDS might absorb MCI Systemhouse, the phone giant's computer-services unit, which has 9,400 employees. Sources close to the talks say EDS is not the only potential partner for MCI and that no deal is imminent. The companies decline to comment. But Brown's 25-year telecom expertise and knowledge of MCI—he bought its Internet backbone for C&W—could give EDS an edge.

Deal or no, investors are cheering Brown's appointment after a four-month search to replace CEO Lester M. Alberthal Jr. The stock is up more

Corp. in 1996. Net earnings, excluding one-time items, this year will drop to \$832 million, on a 13% sales gain. Estimates by Lehman Brothers Inc. and Patrick M. Burton. That follows a profit decline in 1997 and anemic growth of 5.5% as EDS lost market share.

While the company has recently signed up lots of new business—estimated \$13 billion in contracts this year—Brown faces a big drag on growth: GM. Analysts figure margins in GM business, which accounts for 24% of revenues, have fallen from 12% or more to single digits as GM has demanded lower prices and different services. Stephen T. McClellan of Merrill Lynch & Co. thinks Brown should "have serious discussions with GM to renegotiate the contract." Brown is arriving at the moment too soon.

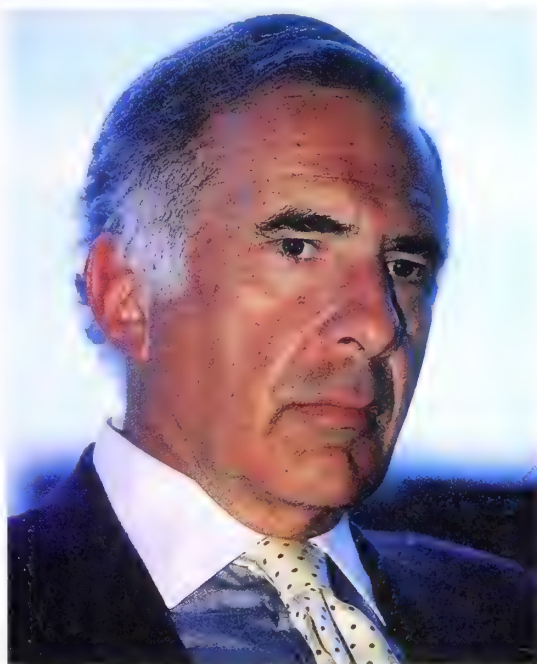
By Wendy Zellner in Dallas, Texas bureau reports

ERS

RL ICAHN'S XIC TAKEOVER

ustrial-waste giant Philip gives the raider a heap of trouble

rl Icahn has squared off against some of the biggest names in business the years—from Texaco to Western Union to RJR Co. Usually, the 62-year-old corporate raider has walked away richer after finding an undervalued property—such as World Airlines Inc. (page 2) and pushing through restructuring and refinancing programs. But his latest target, Canada's Philip Services Inc., is testing Icahn's mettle even months after he bought into the \$2 billion industrial-waste giant, the company is teetering. "I think it's going to be a lot of pain," says Icahn. "But there's a chance to save the company."



ICAHN: "There's going to be a lot of pain"

...survives the near term, unless Icahn, management and bank creditors can agree on a restructuring plan, the company is threatening to throw the employee company into bankruptcy and potential liquidation. Icahn has persuaded management to go through prepackaged bankruptcy, but the banks—who met with the company on Dec. 15—so far have shown no interest in going along. Philip "will either be restructured, or it will not exist," concludes James Sbrolla, a former Philip vice-president and now a top investment adviser. Philip's failure would be a blow to Icahn, who could lose some \$50 million of his net worth. Moreover, having just spent the spring to take over Marvel

Entertainment Group Inc., his reputation as a savvy investor is on the line.

As recently as 1997, Philip was marching across the U.S. and Britain buying up smaller waste handlers. Investors pushed its stock from less than \$8 in June, 1996, to nearly \$20 a share in September, 1997. A \$380 million stock offering that November sold out easily. But in January, 1998, Philip began a series of write-offs that topped \$360 million, leading to a \$126 million loss on \$1.75 billion in sales for 1997. The company blamed unauthorized copper trading and restructuring costs. In March, Philip restated earnings for the

prior two years. And by May, founding Chief Executive Allen Fracassi had stepped down.

In July, the company sued its former metals-division president, Robert Waxman, and two colleagues, demanding \$240 million in damages for allegedly masterminding the copper trading. Waxman denies wrongdoing and says he was cast as the fall guy. Philip's stock is now below \$1 a share.

DEEP PROBLEMS. Drawn by Philip's distress, Icahn began buying stock in May, building up a 14% stake. He and Foothill Partners III LP, a Los Angeles investment group, also now control \$200 million of its \$1 billion of debt. Icahn believed Philip was undervalued since it was still producing lots of cash.

But Philip's problems run deeper than Icahn could have known. Court papers allege that Philip faces potential environmental liabilities of \$100 million or more. And low commodity prices mean Philip is getting less for scrap metal. Philip lost \$719 million in the first nine months of 1998, on sales of \$1.9 billion.

Management is also in turmoil. Fracassi recently was reinstated as "interim CEO," shouldering aside John G. McGregor, a partner at Southfield (Mich.) turnaround firm Jay Alix & Associates. McGregor, brought in in October, continues as "chief restructuring officer." He says he didn't object to Fracassi's return.

Now, lenders are considering three restructuring plans. Icahn wants Philip's banks to convert \$800 million in debt to stock. A Detroit landfill company, Soave Enterprises LLC, is working with Citigroup on a proposal to chip in between \$100 million and \$200 million in new equity, which would leave lenders with less stock. And Philip's management is pushing for a blend of the two proposals. "There will be a lot of negotiation," says McGregor.

Keeping Philip out of the Dumpster may prove daunting even for Icahn. "It usually gets darker before dawn," he says. For Philip, however, dawn seems far off.

By Joseph Weber in Hamilton, Ont.

MESS
S UP
PHILIP

NOV. 1997 Philip sells \$380 million worth of stock after a major expansion in the U.S. and Britain.

JAN. 1998 Philip begins disclosing earnings charges that eventually top \$360 million for 1997. Blames restructuring and other costs.

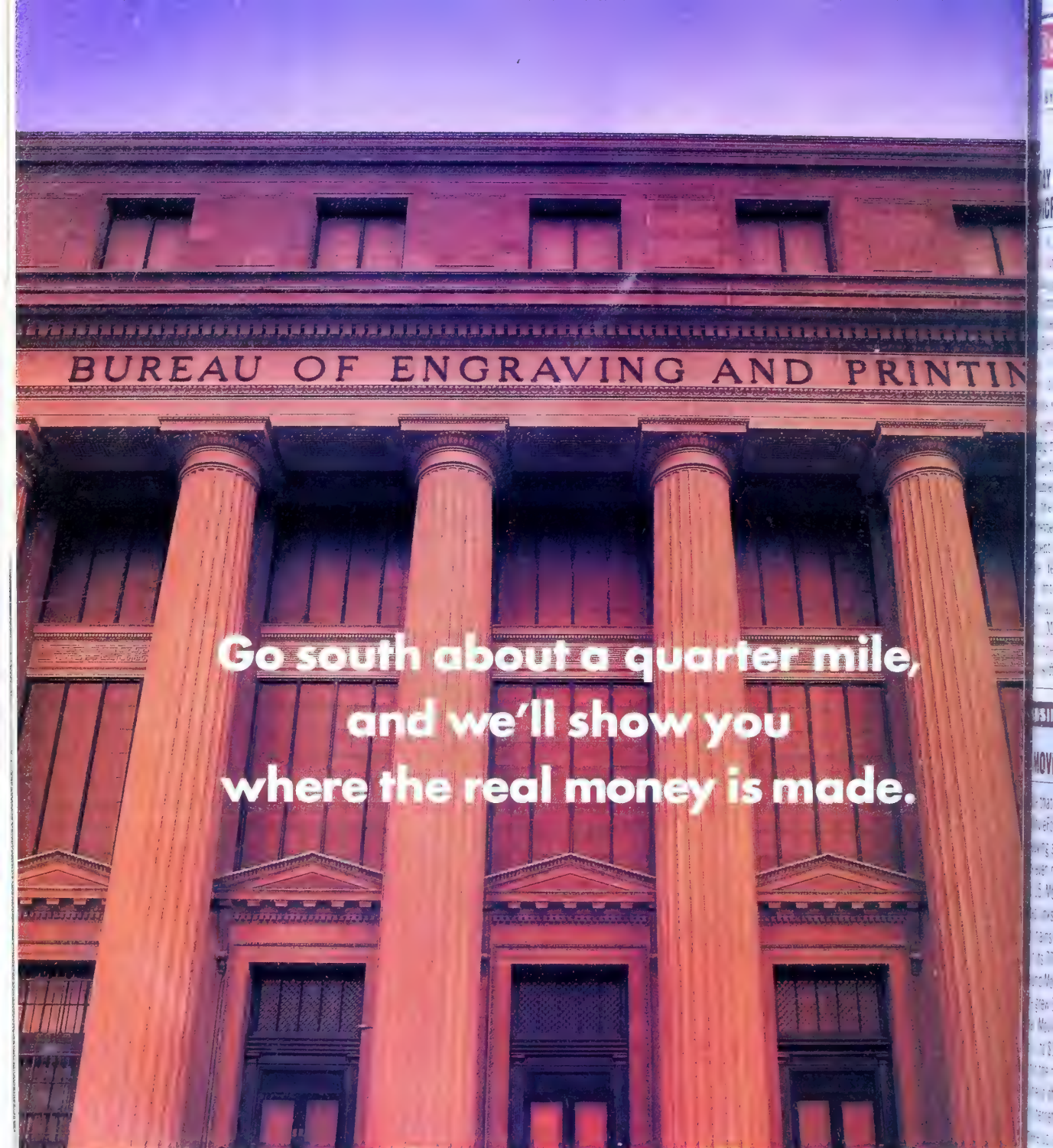
MAY 1998 Company demotes founding CEO Allen Fracassi and replaces chairman. Carl Icahn begins buying stock.

JULY 1998 Company sues its former metals-group chief, Robert Waxman, and two colleagues, charging fraud. Waxman says he's cast as the fall guy.

SEPT. 1998 Icahn, with 14% of stock, buys debt. He's believed to control \$200 million.

OCT. 1998 Philip hires turnaround expert John G. McGregor as "interim CEO."

NOV. 1998 Philip recasts McGregor as "chief restructuring officer," restores Fracassi, and haggles with Icahn.



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ED BY KELLEY HOLLAND

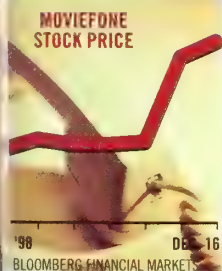
DAY CHEER MICROSOFT

RE RECESSING THE soft antitrust trial for holidays, U.S. District Thomas Penfield Jack-ive the software giant a On Dec. 16, noting that ica Online Inc.'s ver of Netscape Com-ations Corp. could mean y significant change in aying field," he told the e Dept. to share any of ocuments it receives g the government's r review. Since the an-ement of the AOL-ape deal and a joint re with a third Mi- rival, Sun Microsys-nc., Microsoft has ar- hat the merger proves icrosoft could easily be

LOSING BELL

MOVIE HIT

oice that greets callers MovieFone automated -buying service will rk even more filmgoers. c. 15, MovieFone said it ded links with three big r chains. It also said of its 777-FILM phone e and Movielink.com ite grew 30% in the ear. MovieFone shares 6%, to \$13.75. One for the rise, says Cibello of Robotti & "Internet fever." Net make up some 25% of one's business—and are spared that voice.



toppled from its market-leader position. Jackson refused Microsoft's request to start full discovery on this issue, but noted that the company can renew its request if it isn't satisfied. Justice had no objections.

THE FED GETS TOUGH ON HEDGE FUNDS

BOTH BEFORE AND AFTER THE Federal Reserve Board engineered a Wall Street bailout of Long-Term Capital Management last September, Chairman Alan Greenspan told Congress that lenders are better able to rein in hedge funds than regulators would be. But now, the Fed may be revising that view. "Private market discipline seems to have largely broken down" in LTCM's case, Fed staffer Patrick Parkinson told a Senate committee on Dec. 16. Now, the Fed may limit lending to hedge funds, tighten collateral rules, and bolster "stress-testing" ahead of extreme market shifts.

DEUTSCHE BANK'S NEW ROLE

IS DEUTSCHE BANK READY TO play in the world of global investment banking? Just weeks after the German banking giant announced its \$9 billion acquisition of Bankers Trust, it unveiled a plan to spin off more than \$24 billion in industrial holdings—in companies ranging from Metallgesellschaft to DaimlerChrysler. These interests will be placed in separate limited partnerships, all controlled by a new unit called DB Investor. "This will optimize value creation for our shareholders," says chief executive Rolf-Ernst Breuer. And getting rid of corporate shareholdings solves conflict-of-interest problems for Deutsche's budding M&A business.

HEADLINER: JILL BARAD

BARBIE DOLLDRUMS

At an investment conference on Nov. 5, Mattel CEO Jill Barad danced along to Barbie ads and assured analysts that forecasts of 9% to 11% earnings growth were on target. But now she's singing the blues. On Dec. 14, Mattel said 1998 earnings may come in 35% below expectations and revenue would be short \$500 million. "It was a shocking shortfall," says Sean McGowan of Gerard Klauer Mattison.

How could a \$4.8 billion company get blindsided like this? Inventory cut-backs at retailer Toys 'R' Us are a big factor. But

Mattel may have been too optimistic as well. Barad built Barbie into a \$1.9 billion business, but failed to see that sales were slowing because of changing tastes. Mattel also may have shipped too much product in 1997, leaving stores stuffed with toys. It thought—wrongly—that orders would pick up in late 1998.

Mattel hoped to soften the blow with news of its \$3.8 billion purchase of educational software maker Learning Company. But for now, Mattel has to show skeptical investors it has a grip on its core business.

By Kathleen Morris



THE CITI NEVER STOPS CUTTING

WHEN CITICORP AND THE Travelers Group merged to create Citigroup, boosters proclaimed a new era in finance, with cross-selling, not cost-cutting, the road to success. Now, the new era seems a ways off. On Dec. 15, Citigroup said it would slash 10,400 jobs and take a \$900 million charge to reduce expenses. That could take a while: Cost cuts don't come easy to the company. In 1997, Citicorp said it would pare 7,500 jobs in the next 18 months. But as of Sept. 30, it had only cut 3,116, a spokesman says.

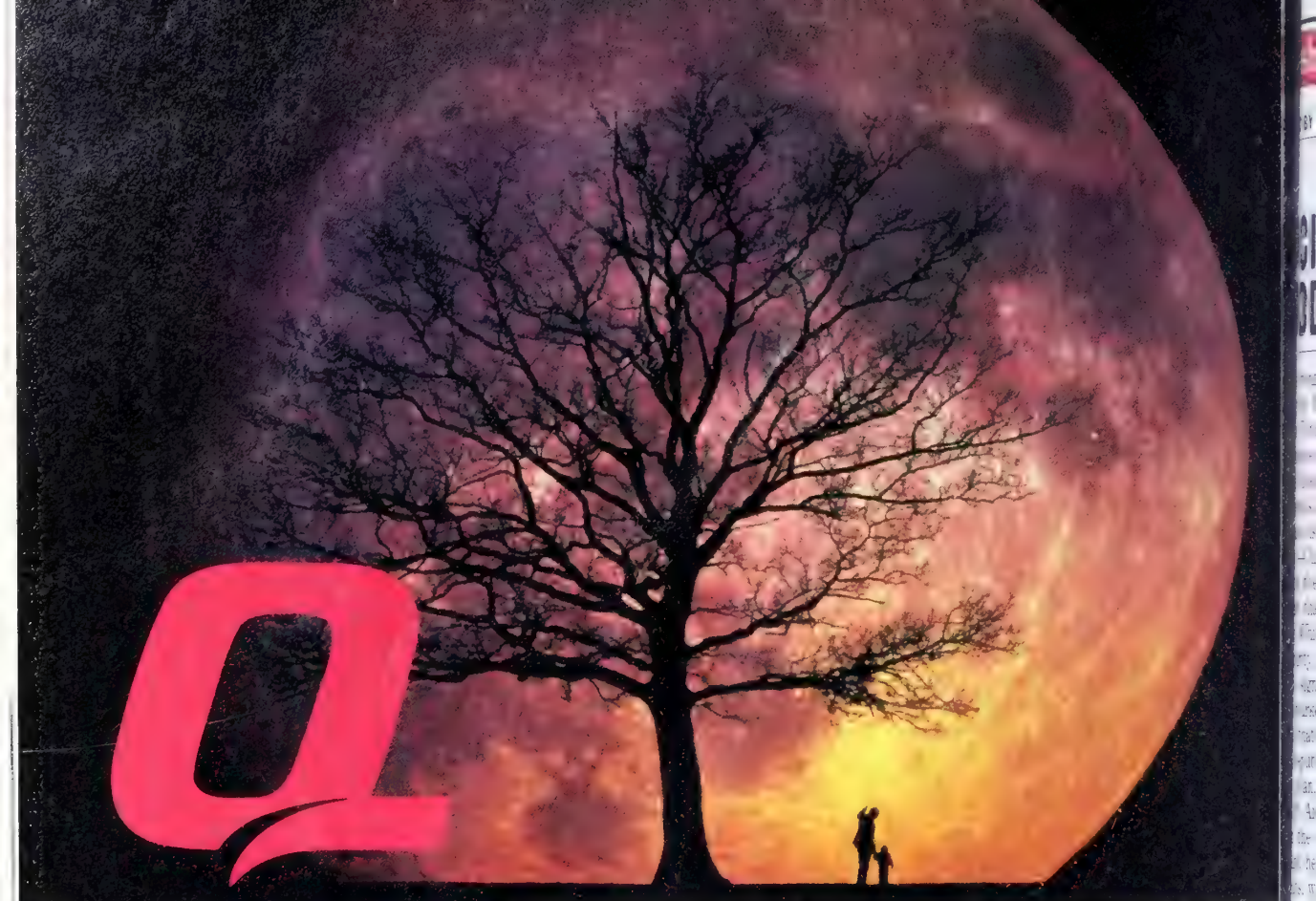
CLOSING THE BOOK ON ASBESTOS

ASBESTOS IS COSTLY TO GET rid of. Just ask Owens Corning. Ever since the Toledo company stopped making the cancer-causing insulating

material in 1972, it has been hard put to dispose of the liabilities the business created. On Dec. 15, Owens Corning announced a \$1.2 billion settlement to resolve 176,000 asbestos cases, about 90% of its total pending. The company will pay plaintiffs, mostly in 1999 and 2000. It will also borrow some \$1.4 billion, and take a \$900 million aftertax charge. "The good news is that it settles most of the cases," says Merrill Lynch analyst Jonathan Goldfarb.

ET CETERA...

- American Airlines' gate and reservation agents voted not to unionize.
- 3M said fourth-quarter profits will drop 10% on slower production and sales.
- Amazon.com's stock rose over 46 points on a still more bullish Wall Street forecast.
- New York City's ban on tobacco ads was struck down by a federal judge.



Q

Why does the moon
stay in the sky?

What makes
the stars twinkle?

How does
the Internet work?

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ED BY LEE WALCZAK

SOCIAL SECURITY: BEHIND CLINTON'S HIDDEN TILT TO THE RIGHT

the frenzy of Bill Clinton's battle to escape impeachment, the group has been more steadfast in his defense than liberals. Feminists, civil rights workers, and union activists jammed congressional switchboards with appeals to him to hide. But even as they've gone to the barricades for liberals have done so with an existential sigh. Why? The reason is that on an issue they care deeply about—Social Security—Clinton is about to deal them out.

In the furor over Presidential crime and punishment, the fact that on Dec. 8, Clinton startled a White House conference on Social Security by making a major concession signaled his openness to some form of market investment.

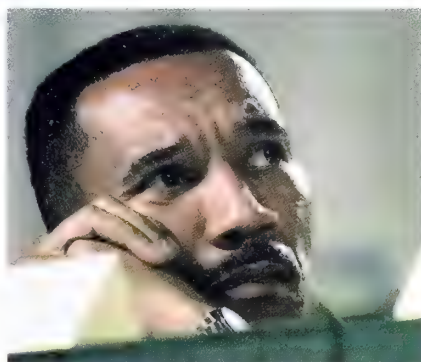
Up to that point, Clinton was stalling, and Republicans would offer their own plan. So why speed up the move? Aides say he wanted to show the country in the face of the GOP ethics assault. And he needed to outflank liberal Democrats, who have gained momentum in their drive to fight individual accounts. The left wing opposes plans that would require individuals to invest a small portion of their payroll taxes—say, two percent—in private accounts because it fears undermining one of the last big social insurance programs.

TRENCHES. By reprising his "triangulation" strategy, Clinton edged closer to Republicans and moderate Dems and isolated the liberals. He did the same thing in 1995 amid howls on the left, he heeded GOP calls to overhaul Social Security. "People are concerned about where the President is going," frets Roger Hickey of the Institute for America's Future, a liberal think tank.

Clinton's overture was praised by GOP leaders, making it likely that any accord—if one can be reached amid the current rancor—will include market investments. He did

not say if he would back individual accounts or stock purchases through the Social Security Trust Fund. But he raised the hopes of lawmakers like Senator Daniel P. Moynihan (D-N.Y.) and Representative Jim Kolbe (R-Ariz.) who want to let workers invest at least a portion of their nest eggs.

That leaves old-line Democrats playing defense. AFL-CIO President John Sweeney vows "the most aggressive grassroots campaign in the history of the AFL-CIO" to kill privatization. Groups such as the NAACP, led by ex-Representative



MFUME: Helping lead the backlash

Kweisi Mfume (D-Md.), and the National Organization for Women are joining labor to stage hundreds of community rallies to gin up opposition. Also under discussion: a big-bucks advertising campaign.

STICKING POINT. But with Clinton leaning toward the privatizers, many liberals—including union brass—realize that they may eventually have to back some sort of investment plan to boost the trust fund's anemic return. Senate Minority Leader Thomas A. Daschle (D-S.D.) may support investing a portion in marketable securities, though he opposes private accounts. House Minority Leader Richard A. Gephardt (D-Mo.) might back voluntary

investment accounts that augment basic benefits. But both insist that Social Security remain an insurance program, not an investment plan. So any losses must be spread throughout the system, not borne by individuals.

How will Clinton reconcile the conflicting views? If history is any guide, he'll tilt right, hoping that a deal gives him the positive legacy he craves. "Investing Social Security reserves in the stock market has emerged as the political path of least resistance for both parties," says Michael Calabrese of the Center for National Policy, a Democratic think tank. All that remains is for the President to convince his liberal allies.

By Howard Gleckman

CAPITAL WRAPUP

LIVINGSTON ZIGS—AND ZAGS

House Speaker Bob Livingston is confounding pundits with risky moves. He once favored a motion picture censuring President Clinton as an alternative to impeachment. But after consulting with GOP Whip and Clinton *bête noir* Tom DeLay (R-Tx.), he became a born-again impeachment backer. Minutes after a Judiciary panel sent articles of impeachment to the full House, Livingston enraged Democrats by slamming the door on any censure option.

Democrats aren't the only ones fumbling. The Louisiana Republican has also bucked his own party by refusing to endorse a call for up to \$25 billion in new defense spending next year. The move, championed by Senate Majority Leader Trent Lott (R-Miss.), is the centerpiece of a GOP attack on Bill Clinton's "hollow military." As Appropriations chairman, Livingston often favored more defense projects, especially for his district. Now he worries that Lott's effort would violate the balanced-budget law and require huge offsetting cuts in domestic programs.

BIG BRO AND YOUR CHECKBOOK

► A proposed rule by federal bank regulators to stem money-laundering may be headed for trouble. A coalition of privacy and civil rights groups says the proposal, scheduled to take effect next April, would intrude on the privacy of bank customers. The feds want banks to know the origin of all customer funds and to report any unusual transactions to law enforcement agencies. Foes plan an Internet campaign (www.privacy.org) to fan opposition.

INDONESIA

WHAT DID MOBIL

There are days when Teungku Bintara wonders how he ever survived. For six months in 1990 and 1991 he languished in a military prison camp in Indonesia's Aceh province. One day, Bintara, then the headman of a nearby village, was put inside a room whose walls were splattered with human blood and hair. During an interrogation that left him blind in the right eye, Bintara claims an Indonesian army officer whipped his scalp with a frayed cable, burned his pubic hair with a match, and held live electric wires to his genitals and temples. Another time, the officer threatened to execute Bintara if he did not disclose the name of a Muslim separatist guerrilla leader, despite Bintara's insistence he didn't know him.

Bintara's gruesome experience unfolded only a few hundred yards from the chemical plants and white storage tanks of P. T. Arun, a liquefied natural-gas (LNG) producer in which Indonesia's state-owned oil monopoly, Pertamina, holds a controlling 55% stake and Mobil Corp. owns 35%. At the time of Bintara's detention, the plant employed 1,800 workers and was frequented by several Mobil advisers. Human rights groups have documented Rancong as a known torture site. But Mobil says it was not aware of any such activity. Bintara claims he saw fellow inmates in the Rancong camp being tortured and then tossed "like dogs" onto trucks.

TERRIBLE TALES. Today, all that remains of Rancong is a crumbling cluster of row houses. But what happened at Rancong and throughout Aceh eight years ago is very much a live issue in Indonesia. Since the fall of strongman President Suharto in May, a stream of witnesses such as Bintara have come forward with tales of atrocities committed by Indonesia's military. The events occurred during a three-decade campaign to suppress a guerrilla movement that sought independence for Indonesia's westernmost province. The survivors' tales raise questions about what Mobil knew and when. On Oct. 10, a coalition of 17 Indonesian human rights organizations issued a



GRIM EVIDENCE: In late August, the National Commission on Human Rights disinterred human remains in Aceh province as it probed alleged military

KNOW? Mass graves suggest a brutal war on local Indonesian guerrillas—in the oil giant's backyard

ment asserting that Mo-
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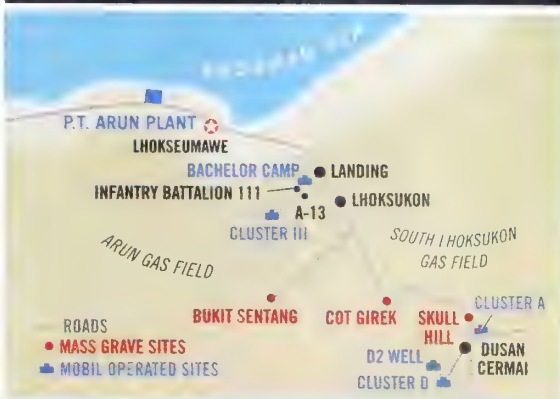
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early 1990s. "I can
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says Neil Duffin, exec-
vice-president for pro-
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mina Public Relations
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were its victims.

ws of these incidents is breaking
he wider world. U.S. Ambassador
onesia Stapleton Roy discussed the
tions on Nov. 3 in Jakarta with
ig Mobil Chairman Lucio A. Noto,
denied knowledge of any misuse of
equipment or facilities. A State
official told BUSINESS WEEK that
I.S. government has "expressed



■ RICH RESERVES: Mobil has a 35% stake in an LNG venture with state-owned Pertamina



THE KILLING FIELDS OF ACEH

concern" about the allegations and is calling for Indonesian authorities to conduct a "full investigation." "The U.S. continues to monitor the situation," the official said. "Allegations of abuses should be investigated by the country concerned."

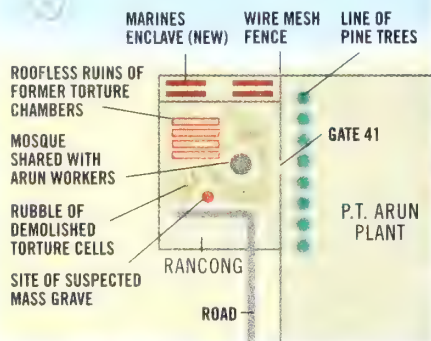
The controversy is likely to grow as more graves are opened and bodies found. Indonesian human rights organizations and government officials, who now are receiving some help from the military, say they so far have identified 12 mass graves. One grave is on Pertamina-owned land that is less than three miles from a Mobil gas-drilling site. Whether this site contains human remains will be known when the government exhumes it next year. So far, officials have unearthed remains in 6 of the 12 sites. Other suspected graves in close proximity to Mobil operations, such as at Rancong, have not been investigated. Indonesian human rights commission member B. N. Marbun estimates that at least 2,000 Acehnese torture victims—most of them civilians—are buried around the Aceh area.

TURMOIL. The discoveries typify the ethical issues that a growing number of multinationals must confront after years of doing business in Third World dictatorships. While there is no legal precedent for holding companies legally accountable in troubled circumstances, there is debate on what moral responsibilities multinationals have overseas.

To find out what happened, BUSINESS WEEK conducted a five-week investigation of the allegations against Mobil. The probe included three trips to the Aceh area and dozens of interviews with torture victims, government officials, residents of villages near the mass graves, and local and foreign contractors who worked for Mobil and P.T. Arun. BUSINESS WEEK also spoke with several Indonesians who worked on Mobil facili-



THE TORTURE CAMP ADJOINING P.T. ARUN



TORTURE VICTIM: Bintara claims an officer whipped and burned him and threatened death

STRONG DENIAL “I can frankly say that we have no knowledge of [human rights abuses in the early 1990s] happening” —NEIL DUFFIN, MOBIL EXECUTIVE V.P.

ties in Aceh. Mobil answered written questions and allowed a tour of the Aceh facilities. Mobil representatives accompanied a BUSINESS WEEK reporter to alleged grave sites. Finally, Mobil's headquarters in Fairfax, Va. provided detailed responses to questions from BUSINESS WEEK's reporters and editors.

This probe uncovered more than a dozen sources who either witnessed atrocities or came upon their aftermath. Two contractors say they told local Mobil managers that they had found human body parts close to Mobil sites, for example. And a former Mobil employee says rumors of massacres and of reports that Mobil equipment was being used to dig graves were frequently discussed at workplaces and in a company cafeteria. Yet there is no clear evidence that Mobil's top management had direct knowledge of such reports.

PEACEFUL PURPOSES. Mobil does say that it loaned the army excavators and supplied troops with food and fuel on occasion for three decades. But it insists Mobil managers had no record that the army was using this help for anything but peaceful purposes. Mobil also says it has no record of the army using its maintenance facilities or other buildings, as human rights groups allege. Instead, Duffin says, Mobil was told that any equipment used was “for projects beneficial to the community,” such as building roads. If facilities and equipment were used for other reasons, he adds, “I don't believe we can be held

responsible.” On Nov. 5, Noto said at a press conference in Jakarta: “If anything happened because somebody used the equipment in a wrong way, I'm sorry about that.” Noto added that Mobil had “no control over that.”

In a letter to BUSINESS WEEK, the company describes the ambiguities of its situation. “Did we know we were operating in the middle of a conflict? Of course we did, and so did the world. ...[But] based on our inquiries and

search of records, reports from Mobil's employees on the alleged mass graves and other military human rights abuses in the area were brought forward to Mobil's management in Indonesia.” says if it had known about abuses associated with operations, it would have protested aggressively.

Mobil also points out it does not own any facilities in its own oil and gas operations in Aceh. Real estate and buildings where Mobil and P.T. operate are owned by Pertamina. Also, most of the equipment used by Mobil in Indonesia is either leased from outside contractors or owned by Pertamina. The \$3 billion LNG venture, meanwhile, Arun's Pertamina-appointed management had control of the property.

Those interviewed in Aceh argued the military operation was too big a talk of killings too widespread for company not to know. “There wasn't a single person in Aceh who didn't know that massacres were taking place,” says H. Sayed Mudhahar, a former top government official in Aceh. “From childhood to the elderly to the mentally ill, everybody was afraid.” In the early 1980s

TERMINATION OF EMPLOYMENT

We regret to inform you that we have to terminate your employment effective the date of your suspension from work on 1 August 1990.

Mobil Oil Indonesia Inc.

CONFIDENTIAL

To: T. Abdulrahman Baharuddin

PORT BANG 1400, JAKARTA PUSAT
JAKARTA 10110 INDONESIA
CABLE: MOBIL OIL JAKARTA
PHONE: 711211
TELEX: 42003

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A. J. HOEHL BUILDING
SENAYAN, JAKARTA

21 August 1991

TERMINATION OF EMPLOYMENT

We regret to inform you that we have to terminate your employment effective the date of your suspension from work on 1 August 1990.

The decision was made with reference to the letter of Pertamina/Bahagut No. 351/3/PBR/91.

Under the above circumstances and in line with existing Company policy, you will be provided with a severance payment of Rp. 5,296,004.-(Five million two hundred ninety six thousand six hundred ninety four rupiahs) which is subject to tax and any outstanding loan. For further details please see attached worksheet.

If you have any question about the severance payment, please contact Molla Barakap, Employee Relations Department in Blok Sabun.

[Signature]

S. Herostono Tjokromadine
Vice President Relations



MISSING SINCE 1991 Baharuddin hasn't been seen since an army officer took him from his Mobil office

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fore the killings, Sayed had been a public relations manager for P.T. Arun. Faisal Putra, an attorney in Lhokseumawe who intends to file a suit against Mobil on behalf of victims, agrees: "The crimes occurred over a long period of time. Mobil Oil cannot utter the words, 'We didn't know.'"

Yet many ambiguities remain. Several Acehese victims and witnesses identified by human rights activists as Mobil employees later turned out to be contractors. Almost everyone interviewed in Aceh declined to speak on the record. Their explanation was that, because Mobil and P.T. Arun so dominate the economy in Aceh, they feared they would not be able to find good jobs or win more contracts if their names were used. Others feared military reprisals.

Whatever actually occurred, the Indonesian government's campaign to quell separatist unrest dragged Mobil into a morass. The separatist rebellion traces its origins to four centuries of fierce Acehese resistance against Dutch colonial rule. After Indonesia declared independence in 1945, Aceh's fight for autonomy was crushed by then-President Sukarno. Aceh plunged into wrenching poverty.

COMBAT TROOPS. Then came Mobil Oil's accidental discovery in 1971 of one of the world's richest onshore reserves of natural gas, estimated at 14 trillion cubic feet. The oil-and-gas industry quickly became the most important source of revenue for the central government in Jakarta, much to the resentment of Acehese. Most of the top jobs and contracts went to ethnic Javanese. Despite dire local poverty, less than 10% of Aceh's wealth is invested back into the province, says Adinan Hashim, head of Aceh's Economic Planning Agency.

Following the opening of Mobil's P.T. Arun LNG joint venture in 1976, a guerrilla movement declared independence. Suharto sent troops into Aceh when villagers rioted and clashed with hundreds of settlers from Indonesia's main island of Java and started to block roads.

As violent clashes increased, troops started pouring in from Jakarta in May, 1990. Over the next few months, the



■ SERIOUS ALLEGATIONS: Activists allege Mobil's equipment was used by the army to dig graves. Mobil actively denies it

force had reached thousands of soldiers and included the feared Army Special Forces with their signature red berets. "All of these new people coming in needed logistical support, so they went to all of the companies and began commandeering facilities," says former Aceh official Sayed. One such facility was Rancong, a vacated housing development for construction workers and Mobil employees at P.T. Arun.

The forces set up a base camp at an army facility known as Post A-13 in Landing, the site of Mobil's Arun gas field and a few minutes' drive from a Mobil airstrip and a housing compound known as Bachelor Camp.

Soon afterward, witnesses say, evidence of the military's gruesome handiwork was strewn everywhere. While traveling in late 1990 along a road leading to a Mobil oil well known as D2—19 miles southeast of Landing, a damage-claims inspector employed by a Mobil

contractor came upon a vacant sugar plantation. They were feeding on something that appeared to be a dead animal. He dug a dozed pit with dirt piled over it. "They were obviously human bones," says the inspector, who spoke on condition his name not be used. "The pigs were rooting there on a hip bone, and the white knobby part of the bone was visible." He told him the army had dug it up and executed Acehese villagers in retaliation for an attack on the settlement. The inspector says he informed Mobil manager, who did not make a record of the incident. "The army is not something you argue with," explained the inspector. Mobil says it has no knowledge of the incident.

DUMP TRUCK. Along the same road a few months later, another Mobil contractor was part of a team taking soil samples outside of his Cermat, a village of 600 people living in wood shacks with dirt floors, and about 10 miles from D2. As an excavator shoveled a mound of earth into a dump truck, the Mobil construction site truck driver noticed a body lying on the ground. He jumped out of the truck, picked up the shoe, and was lapsed in shock. It was

tached to a severed human leg. The

spector reported the incident to a heavy-equipment supervisor at the construction office. "He had no reaction," says the contractor. "At that time was normal not to say anything, just keep quiet." Mobil says it has no record or knowledge of such a report.

This discovery was made near a site that was notable for its deep, narrow crevices created by seismic activity. Locals have since named it "Skull Hill." The reason, they say, was hard to tell. The stench of rotting human flesh. Skull Hill could be smelled half a mile away. When Bil Maruf, headman of Dusun Cermat, went bird-hunting in the area one day, he found three corpses next to bulldozer tracks. Skull Hill is a large expanse of land that Pertamina had acquired for Mobil to develop, though Mobil was not using the project at the time, says Jon W. Loader, Mobil Asia public-relations manager. Still,

At some point it stops being your
wireless phone
and just becomes
your phone.

like maybe,
tomorrow.

It's within your reach.



To market, to market, to pizza joint, to peewee soccer. AT&T Digital One RateSM transforms your wireless phone from something-for-emergencies into something-for-everything.

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International Business

mer Mobil employee and two current Mobil contractors say that company employees traveled that road every day in 1990 and 1991.

Around the same time, rumors spread of massacres in Bukit Sentang, a village about 15 miles away from Skull Hill. In 1991, Mobil used heavy equipment to widen a road that passed through the village, according to a former employee of Mobil's planning department who used the road to reach a Mobil-operated gas field farther south. "Every time I drove out there, the subcontractors stopped my car," says the source. "They said, 'No, don't go out there. Don't you know the army is killing people and burying them in mass graves with Mobil equipment?'" This became a topic of lunchtime conversation at Mobil's Bachelor Camp mess hall, but it never went into an official report, he says. Mobil says it does not know of its equipment being used in that area.

Yusuf Kasim, a local farmer, knew the grounds well. He says the army paid him \$4 a night to stand guard over a borrowed excavator to prevent anyone from siphoning fuel from its tank. He says he watched soldiers execute 60 to 70 blindfolded Acehese men at a time



IN PRAYER FOR THE DEAD: Since the fall of Suharto, scores of witnesses have told of military atrocities against the Aceh independence movement

with M-16 rifles, shooting them in the back so they tumbled face-first into a mass grave across the rice field from his house. He claims he recognized one victim, Sulaiman, as a Mobil contractor. Sulaiman had been held at the army barracks at Post A-13, which is across the

street from a Mobil well. "The bulldozer didn't kill Sulaiman, so the soldiers ordered the backhoe operator to cut him in half with the shovel," Kasim recalls. Mobil says it has no knowledge of the incident. In late August, the International Commission on Human Rights

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red human remains at Bukit Sen- in a somber ceremony. An Aceh- d human rights group photographed gers removing an intact pair of blue s from a skeleton.

SHED. Sulaiman was hardly the only nese who disappeared. On July 10, an army officer walked into the of Mobil's production department walked out with T. Abdullah Ba- idin, a nine-year Mobil yee. A colleague later us widow, Hasnidar, then ng their one-month-old hat the officer had first l permission from Ba- idin's superiors but had rest warrant. So she lained to Baharuddin's and to a Mobil public- ns manager. More than a year lat- Aug. 21, 1991, Hasnidar finally re- a letter from Mobil a year later. It hat Baharuddin's employment had erminated and that he was to re- \$3,500 in severance pay "in line xisting company policy." Detainees ed from Rancong later told her ad seen Baharuddin there. Ex- Loader: "Mobil did inquire through riate government channels of Ba- lin's status and learned that he en detained by the authorities for y reasons." And Mobil points out

that no company can stop lawful arrests on its premises.

P.T. Arun also says it had little control over Rancong once the military com- mandeered the facility in 1990. "They said they need to use our facilities for 'security purposes.' We could say noth- ing," recalls a Pertamina official famil- iar with the plant. "They were the army." The army even asked P.T. Arun

WIDESPREAD FEAR **“There wasn't a single person in Aceh who didn't know [about the] massacres”** —

EX-GOVERNMENT OFFICIAL H. SAYED MUDHAHAR

to donate sarongs—local garments—so that prisoners could wear them while praying at a company mosque. On Fri- days, P.T. Arun employees prayed along- side pale, gaunt prisoners, he adds.

Given how tense the situation was, it is fair to ask what a company in Mobil's predicament should have done. If Mobil had witnessed human rights abuses in Aceh, the company says it would have protested such abuse to Pertamina and to Jakarta. It also says it would have referred issues involving potential criminal conduct to appropriate authorities.

This is in line with what ethics experts suggest. "Any time a corporation is in the middle of human rights violations, it needs to say something," says Human Rights Watch Executive Director for Asia Sidney Jones. "They don't have to be public about it."

But say the worst is true—that Mobil knew of the killings and did nothing. In terms of a company's legal responsibility,

U.S. law is murky because there is no precedent. The Alien Tort Claims Act allows U.S. companies to be sued for wrongful actions committed overseas. In the last few years, human rights organi- zations and foreign victims have filed suits in U.S. courts seeking damages for activi-

ties by Royal Dutch Shell in Nigeria, Unocal in Burma, and Texaco in Ecuador. The cases remain in the courts.

Meanwhile, Mobil's operations are go- ing strong in the Aceh area, and its busi- ness there remains a lifeline for the struggling Indonesian economy. And as the country painfully examines its past, all those in Aceh—villagers, soldiers, and corporations—must come to grips with a terrible legacy.

By Michael Shari in Lhokseumawe, Indonesia, with Pete Engardio and Sheri Prasso in New York



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comes from a company
protected by us.

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protected by us.

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SECURITY THE WORLD DEMANDS.



ED BY JOHN TEMPLEMAN

HOW BOMBING IRAQ MAY DEEPEN THE DIVIDE IN WASHINGTON

Whenever Bill Clinton really needs Saddam Hussein, he always comes through. It happened again on Dec. 16, when the President launched Operation Desert Storm, ordering air strikes on Iraq on the eve of a momentous vote to seek his removal from office. Short term, Clinton has likely reinforced Americans' support for their commander-in-chief. But eventually, the showdown could entail substantial costs for Clinton both at home and abroad. Military action will boost Clinton's high approval ratings.

Americans rally behind the President at times of crisis. And bold action reinforces the feeling among most voters that the scandal dogging Clinton doesn't justify impeachment. Even before the latest Iraq blowup, a CBS News/*New Times* poll found that 68% of Americans view Clinton as a strong leader, while 66% approve his handling of foreign policy. What's different this time is that many Republicans aren't buying it. Normally, a President's opponents close ranks behind him in crisis. Yet, some senior Republicans are furious at Clinton's decision to strike a day before the impeachment debate was set to begin. "Both the timing and the policy are subject to question," said Senate Majority Leader Trent Lott (R-Miss.), who in the past has advocated harsh measures against Saddam. He pointedly refused to back Clinton. And House Majority Speaker Richard K. Arney (R-Tex.) said doubt about the president "is itself a powerful argument for impeachment."

WIDENING MISTRUST. That breach could be telling in the future. Since World War II, politicians have agreed that partisanship should stop at the water's edge. The impeachment process had already scotched all hope of consensus on domestic policy next year. Now, partisan rifts may destroy 50 years of bipartisanship in foreign affairs. "He's doing it to himself," fumes Representative Ron Paul (R-

Tex.). "Once again, President Clinton is using American troops to deflect attention from his record of lies, distortions, obstruction of justice, and abuse of power."

The mistrust will haunt Clinton, if, as expected, he survives impeachment. From trade liberalization to Social Security, the GOP will question his motives. And the cynicism won't be confined to Washington. Already, Clinton is struggling to hold together the fragile U.N. coalition on sanctions. The joint decision by Clinton and British Prime Minister Tony Blair to attack Iraq without the clear provocation Saddam gave in October intensifies opposition to the U.S. hard line. "This increases the politicization of the issue" when the Security Council discusses the sanctions, says Patrick Clawson, research director at the Washington Institute for Near East Policy.

France and Russia immediately blasted U.N. chief-weapons inspector Richard Butler's latest report—cited by Clinton as justification for the attack—as distorted and exaggerated. And some nations are whispering that U.S. influence weighed heavily on Butler's report on Iraq's lack of cooperation.

While some diplomats may be outraged, they can no longer dismiss U.S. threats as pure bluster. And U.S. voters will be turned off by the GOP's vitriolic behavior when U.S. troops are in harm's way. "Most Americans will support the decisions of our defense leaders.... Saddam must go," warns Sen. Jesse Helms (R-N.C.).

In a sense, there is a new casualty in the nation's impeachment nightmare: Partisan cynicism with Clinton now runs so high that even when they get the hard-edged anti-Saddam policy they have been clamoring for, his GOP foes doubt his timing, resolve, and motives.

By Richard S. Dunham and Stan Crock, with Amy Borris, in Washington



CLINTON: Motives doubted

GLOBAL WRAPUP

THAI SELL-OFF FLOPS

How much are bombed-out Thai cities really worth? About 37¢ on the dollar tops—the average price paid at auction for \$10 billion of baht loans on Dec. 16. The loans were offered by Thailand's Financial Restructuring Authority and are part of \$25 billion in debt owed by 50 finance companies liquidated by the government last year. At the auction, billed as the world's biggest one-day asset sale, it was a flop. Although affiliates of the top-drawer U.S. companies,

from Goldman, Sachs & Co. to General Electric Capital Services Inc., made offers, the agency accepted just nine bids amounting to 8% of the face value of 13,000 loans bundled in 45 lots. Now, it will try to negotiate higher prices.

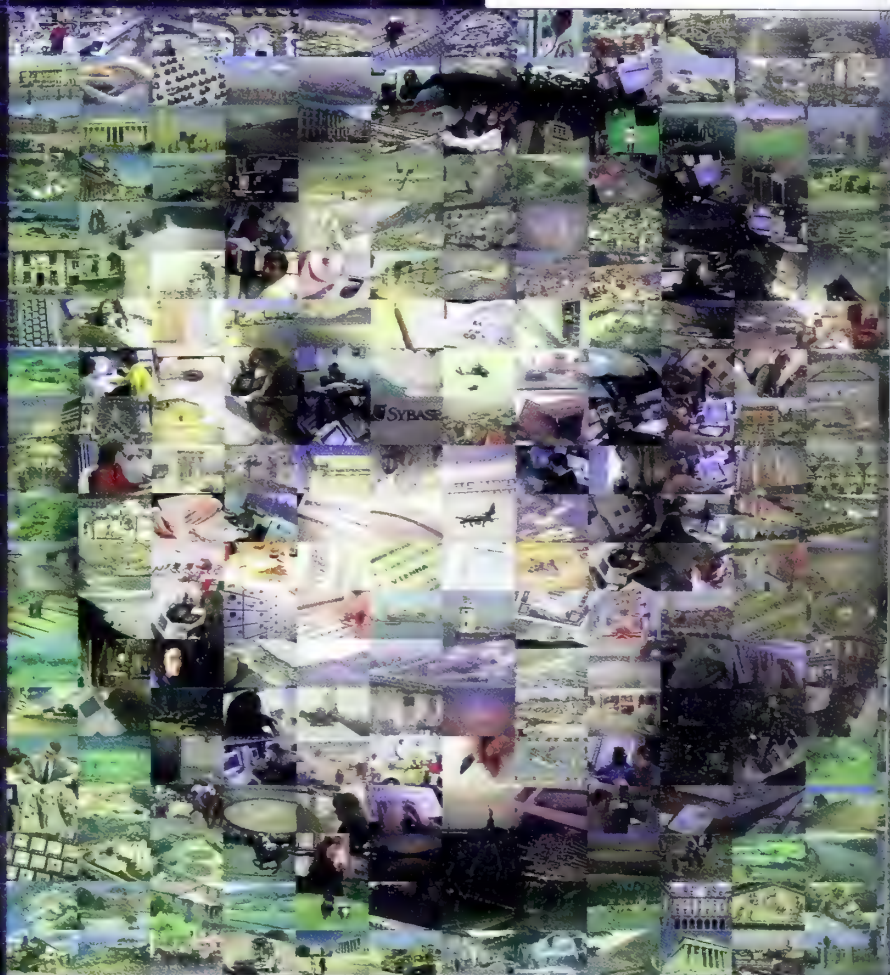
ISRAELI ELECTIONS LOOM

► Israel is careening toward early elections. In the latest blow to Prime Minister Benjamin Netanyahu's fragile government, Finance Minister Yaakov Neeman resigned on Dec. 16. Neeman charged that the coalition had ceased

to function, putting enactment of the 1999 budget in doubt. He said its attention had strayed "from the real issues and challenges facing Israel."

Netanyahu, say analysts, favors a quick election to give rivals less time to organize. His biggest threat, though, comes not from Labor Party leader Ehud Barak, but rather from former Chief of Staff Amnon Lipkin Shahak, who is being courted by Labor and a new centrist party. The popular Lipkin Shahak hasn't announced his candidacy, but polls show he could beat Netanyahu handily.

MINUTES
AFTER THE
BRAZILIANS
FELL TO
FRANCE,
SO, TOO,
DID FOUR
GUINNESS
BOOK
RECORDS.



It set four Guinness® Book World Records. The France '98 Web site, developed using Sybase's Enterprise Application Server Technology, generated the most recorded hits in a month, in a day, in an hour and in a minute. In all, it accumulated over 1.1 billion hits from more than 170 countries. Shoppers purchased World Cup merchandise via an e-commerce store that averaged over 760,000 hits per day. Journalists and staff members accessed valuable, timely information through an intricate intranet. In every aspect, France '98 was a global success, and one that we can replicate for your business. With our proven technology, we can create complete Web solutions that bring together and distribute mountains of information to provide the competitive advantage you need to achieve your organizational goals. To learn more about what we can do for your business, visit www.sybase.com/worldcup or call 1-800-8-SYBASE (Ref. CPBU6).



WHERE TO INVEST

Showdown For Profits



Introduction

Buckled up? With profits under pressure, 1999 looks to be as bumpy as '98. That means investors will have to pick their spots—carefully

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The Framework

Reading the U.S. economy's tea leaves, taking global policymakers' pulses, and fine-tuning the all-important asset allocation strategy

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Strategies for Stocks

How to size up the sectors, from white-hot high-tech to uneven emerging markets. Plus, the best and worst calls of the year, forecasts, and the pros' picks

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The Investment Spectrum

Go ahead, master a market: Whether it's mutual funds or fine art, real estate or cyberspace, there's a place for everyone to play

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The Investment Scoreboard

Information is power, and BUSINESS WEEK's statistical roundup is powerful stuff indeed. Here's the place to troll for data on 900 companies

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SHIFTING TO A LOWER GEAR

Investors may not be able to count on a sharply rising stock market

Anxious? That's understandable. After all, 1998 was a tumultuous year, marked by huge swings in mood—and prices—on global markets. Economies from Russia to Brazil were at the brink of collapse while world leaders from Helmut Kohl to Bill Clinton lost their jobs or saw their power curtailed. True, the U.S. economy hummed along smartly in 1998. But the guessing is that things will cool down in 1999. Increasingly, the experts believe that corporate profits will continue to be under pressure and that, in turn, incomes and growth will weaken. The experts aren't always right, of course—after all, most economists and investment pros have been badly underestimating the strength of the economy and the resilience of the stock market.

The range of estimates for corporate profitability in 1999 is wide. Economists polled by *BUSINESS WEEK* figure that profits will tend to be flat (page 82) because of slowing sales, weak pricing power, and rising labor costs. But earnings per share for the Standard & Poor's 500-stock index, when calculated by aggregating individual company estimates put out by stock analysts, may rise 17% (page 94), with estimates for technology companies coming in at 30% over 1998 results. These estimates typically start the year high and get pared back.

U.S. strategists looking at the overall market are figuring on profit growth of 3.5% or so in 1999. Finally, there are reasons to believe profits could grow by a more respectable 7% to 9%. That's because 1999 comparisons should look good coming after the negative effects on 1998 earnings of huge write-offs in the financial sector and the beating that energy companies took from falling oil prices.

Profits matter, but these days it's not clear just how much. In 1998, thanks to some well-timed easing by

the Federal Reserve Board, stock prices seemed to transcend weakening profits. In fact, when the final tally is in, profits could turn out to have been off by 1% in 1998. For the market to have reached new heights at a time when profits were weakening is nothing short of remarkable. A slight rebound in profits in 1999 could buoy stocks. But if profits disappoint, there's no guarantee that interest rates will decline and soften the blow.

So investors shouldn't count on being carried aloft by a sharply rising market. Instead, they'll have to be highly selective to make money. First, they should survey the landscape—check out what economists are forecasting, what the pros are doing, who's shorting what, and the latest from *BUSINESS WEEK*'s fearless forecasters.

Then, investors should pick their spots. Admittedly, this isn't easy. Just ask the mutual-fund managers who failed once again to beat the overall market averages (page 154). But if they're

game, investors can try out some specially tailored approaches—hunting for undiscovered gems (page 120), for instance, or scanning the market for haven stocks (page 114).

GO EAST? Overseas, some analysts saying, it might be time to reenter the Japanese stock market, on the assumption that policymakers are finally serious about turning the economy around (page 132). Emerging markets, meanwhile, are still strewn with holes and will likely appeal only to the most intrepid (page 130). With the launch of the euro on Jan. 1, investors increasingly will need to do pan-European sector analysis, rather than country analysis, and new or overlooked investment opportunities may become apparent. Still, profits are slowing in Europe, and that will put a damper on prices (page 124).

Some special circumstances, the experts believe, will continue to pump stock prices. Several huge mergers were announced in the last few months of 1998, and the trend should continue (page 151). Technology stocks had a runup again in 1998, and despite

PICKY, PICKY

1999 will be anything but predictable, so to make money this year, you'll have to be highly selective. Start by thoroughly reviewing what the economists and investment pros are forecasting, then tailor a strategy

widely perceived business of this season. Many experts believe there's still room to run for those stocks (page 110). Financial-sector stocks could still get by some bad news they were in 1998, even in this sector there are opportunities (page 108). With the right care and action, investors ought to be able to fashion a winning portfolio in 1999.

By Karen Pearson
in New York



THE NEW YEAR'S BUNDLE OF JITTERS

Profits will flatten out but growth should continue, albeit at a slower rate

The U.S. economy hit some heavy turbulence in 1998—and made it through unscathed. Despite the Asian crisis, crumbling exports, sagging manufacturing, falling profits, the Russian debt default, and a Long-Term Capital Management debacle that threatened the U.S. financial system, the economy didn't miss a beat. When all the data are in, the U.S. is expected to have grown at a stellar pace of at least 3.5% for the third year in a row—with low inflation. And after Wall Street's nosedive this summer, the markets have rebounded.

For 1999, however, the headwinds are picking up. That's the word from the 55 economists in BUSINESS WEEK's Annual Outlook survey. In uncommon unity, forecasters from all around the country expect growth to slow, perhaps substantially. And while only a handful predict a recession, the "R" word is on almost everyone's mind. Economists believe that all of the risks to their forecasts are on the side of weaker, not stronger, growth. They are anxious over homegrown problems, such as sagging profits and a possible stock-market bubble, as well as global risks stretching from Brazil to Japan to Europe.

GROWTH AT 1.7 PERCENT. Still, the betting is that modest growth will prevail, bolstered by steady, if slower, consumer spending growth and by recent interest-rate cuts in the U.S. and Europe. Also, most economists expect further Federal Reserve easing, especially if the ride gets bumpy.

BUSINESS WEEK's Business Outlook editors expect the economy to grow at a subdued 1.7% pace in 1999, measured by growth in real gross domestic product. That rate is a shade below the 1.9% survey average (table), reflecting their belief that domestic demand, the linchpin of 1998 growth, will face formidable constraints in 1999. Also, they



BEST BET

★ **MORE EASING?** If domestic demand stumbles at all in 1999, expect the Federal Reserve to step in quickly with a further cut in interest rates.

BUSINESS WEEK ECONOMIC FORECAST SURVEY FOR 1999

| | PERCENT CHANGE IN REAL GROSS DOMESTIC PRODUCT | | | | REAL GDP | CONSUMER PRICES | TREASURY YIELDS 3-MO. | 30-YR. | JOBLESS RATE |
|---|---|------|------|------|---------------------------------------|---------------------------------------|-----------------------|----------|--------------|
| | I | II | III | IV | PERCENT CHANGE IV Q 1998 TO IV Q 1999 | PERCENT CHANGE IV Q 1998 TO IV Q 1999 | 1999 IVQ | 1999 IVQ | 1999 IVQ |
| SANNE M. CAHN Credit Suisse First Boston | 3.5 | 3.3 | 3.1 | 2.9 | 3.2 | 2.0 | 4.50 | 4.80 | 4.8 |
| THLEEN M. CAMILLI Tucker Anthony | 5.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.3 | 5.00 | 5.50 | 4.0 |
| NSTANTINE G. SORAS Bell Atlantic | 2.6 | 2.9 | 3.1 | 3.0 | 2.9 | 2.1 | 4.36 | 5.20 | 4.4 |
| LIAM C. DUNKELBERG Natl. Fed. of Indep. Business | 3.0 | 2.5 | 3.0 | 2.7 | 2.8 | 1.9 | 4.60 | 5.00 | 4.9 |
| NIEL E. LAUFENBERG American Express Financial Advisors | 3.1 | 2.3 | 2.7 | 2.9 | 2.8 | 2.5 | 4.75 | 5.75 | 4.4 |
| HAEL R. ENGLUND MMS International | 2.5 | 2.7 | 2.4 | 3.0 | 2.7 | 2.6 | 4.05 | 4.50 | 4.3 |
| L NAROFF First Union Corp. | 1.2 | 2.3 | 3.2 | 3.6 | 2.6 | 2.4 | 4.25 | 5.25 | 5.1 |
| SAN HICKOK The Prudential Insurance Co. | 2.0 | 2.0 | 3.0 | 3.0 | 2.5 | 2.2 | 4.50 | 6.00 | 5.2 |
| ZANNE RIZZO Maria Fiorini Ramirez | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.50 | 6.00 | 4.8 |
| MES J. BARKOCY Brown Brothers Harriman & Co. | 2.1 | 2.4 | 2.5 | 2.7 | 2.4 | 2.2 | 4.50 | 5.40 | 4.9 |
| URY HARRIS PaineWebber | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.2 | 4.20 | 5.00 | 4.5 |
| HAEL P. NIEMIRA Bank of Tokyo-Mitsubishi | 2.3 | 2.4 | 2.1 | 3.0 | 2.4 | 2.2 | 4.50 | 5.15 | 4.7 |
| I O'NEILL Bank of Montreal/Harris Bank | 1.3 | 2.1 | 3.0 | 3.2 | 2.4 | 3.0 | 5.25 | 6.45 | 4.4 |
| SHEPHERDSON High Frequency Economics | 3.0 | 2.0 | 2.0 | 2.8 | 2.4 | 2.5 | 4.50 | 5.50 | 4.0 |
| L CHENEY John Hancock Financial Services | 2.6 | 2.3 | 2.1 | 2.1 | 2.3 | 2.3 | 4.25 | 5.40 | 4.8 |
| N R. WILLIAMS Bankers Trust | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.9 | 4.60 | 5.50 | 4.3 |
| HAEL R. PASLAWSKYJ The CIT Group | 1.5 | 2.0 | 2.5 | 3.0 | 2.2 | 2.0 | 4.00 | 4.90 | 5.0 |
| RTIN A. REGALIA U.S. Chamber of Commerce | 1.8 | 1.9 | 2.3 | 2.7 | 2.2 | 2.4 | 4.30 | 5.40 | 5.0 |
| K BERNER Mellon Bank | 2.2 | 1.9 | 2.2 | 2.4 | 2.1 | 1.9 | 3.80 | 5.20 | 4.9 |
| RAKKEN & C. VARVARES Macroeconomic Advisers | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.4 | 4.30 | 5.30 | 4.8 |
| ERT H. SHROUDS Du Pont | 0.5 | 1.4 | 2.8 | 3.8 | 2.1 | 2.3 | 4.50 | 5.30 | 5.0 |
| ODORE H. TUNG National City Corp. | 2.0 | 2.4 | 1.8 | 2.8 | 2.1 | 2.1 | 4.00 | 4.90 | 4.8 |
| RRIS COHEN Morris Cohen & Associates | 1.6 | 2.0 | 2.0 | 2.4 | 2.0 | 2.3 | 4.00 | 5.00 | 4.8 |
| COONS Huntington National Bank | 1.3 | 2.1 | 2.3 | 2.3 | 2.0 | 2.3 | 3.84 | 5.82 | 5.0 |
| EPH W. DUNCAN The Dun & Bradstreet Corp. | 2.4 | 1.9 | 1.5 | 2.3 | 2.0 | 2.1 | 4.25 | 5.30 | 4.8 |
| PHEN GALLAGHER Societe Generale | 1.5 | 1.8 | 2.0 | 2.0 | 2.0 | 2.0 | 4.25 | 5.25 | 4.5 |
| JOLISSAINT DaimlerChrysler | 1.7 | 1.8 | 2.1 | 2.3 | 2.0 | 2.5 | 4.50 | 5.60 | 5.3 |
| T E. KARL WEFA | 1.5 | 1.6 | 2.5 | 2.6 | 2.0 | 2.1 | 4.20 | 5.00 | 4.8 |
| MAYLAND Key Corp. | 2.0 | 1.5 | 1.5 | 3.0 | 2.0 | 2.5 | 3.97 | 4.82 | 5.0 |
| IG WON SOHN Wells Fargo & Co. | 2.5 | 1.9 | 1.8 | 1.8 | 2.0 | 2.3 | 4.25 | 4.80 | 5.0 |
| ID M. BLITZER Standard & Poor's | 1.4 | 1.0 | 2.7 | 2.7 | 1.9 | 2.7 | 3.30 | 4.30 | 4.6 |
| ERT H. CHANDROSS Republic National Bank of New York | 2.3 | 1.5 | 1.8 | 2.3 | 1.8 | 2.0 | 4.15 | 5.10 | 4.8 |
| HOLAS S. PERNA Fleet Financial Group | 1.5 | 1.6 | 1.6 | 2.6 | 1.8 | 2.4 | 4.20 | 5.20 | 5.0 |
| HARD D. RIPPE Prudential Securities | 1.5 | 1.6 | 2.0 | 2.3 | 1.8 | 2.3 | 4.20 | 5.50 | 4.9 |
| ID A. WYSS Standard & Poor's DRI | 1.3 | 1.1 | 2.4 | 2.3 | 1.8 | 2.7 | 4.20 | 4.90 | 4.7 |
| HAEL P. CAREY Credit Lyonnais | 1.4 | 1.6 | 1.7 | 2.3 | 1.7 | 2.2 | 4.45 | 5.30 | 5.0 |
| ES COOPER & KATHLEEN MADIGAN Business Week | 2.1 | 1.2 | 1.6 | 1.7 | 1.7 | 1.9 | 3.60 | 4.50 | 5.2 |
| ART G. HOFFMAN PNC Bank Corp. | 1.8 | 1.5 | 1.5 | 2.0 | 1.7 | 2.0 | 3.70 | 4.63 | 4.9 |
| RLES REEDER Charles Reeder Associates | -0.1 | -0.1 | 2.9 | 3.9 | 1.7 | 2.4 | 4.50 | 4.80 | 5.1 |
| MAS SYNNOTT U.S. Trust Co. of N.Y. | 1.5 | 1.5 | 1.5 | 2.0 | 1.7 | 2.2 | 3.75 | 5.00 | 4.9 |
| IK ZANDI Regional Financial Associates | 1.3 | 0.6 | 1.0 | 3.8 | 1.7 | 2.3 | 4.25 | 5.35 | 5.0 |
| IREEN F. ALLYN Scudder Kemper Investments | 2.0 | 1.2 | 1.5 | 1.3 | 1.5 | 1.6 | 4.50 | 4.80 | 5.0 |
| LIAM C. DUDLEY Goldman Sachs | 2.3 | 1.8 | 1.2 | 0.8 | 1.5 | 1.9 | 3.60 | 4.70 | 5.2 |
| UGLAS LEE HSBC Securities | 2.1 | 0.9 | 1.7 | 1.5 | 1.5 | 2.5 | 3.70 | 4.90 | 5.5 |
| V O. MICHAELIS Weyerhaeuser Co. | 1.8 | 0.7 | 2.3 | 1.5 | 1.5 | 2.7 | 4.50 | 5.90 | 4.5 |
| ID RESLER Nomura Securities Intl. | 1.4 | 1.3 | 1.7 | 1.7 | 1.5 | 1.3 | 3.90 | 4.75 | 5.2 |
| CE STEINBERG Merrill Lynch | 1.1 | 1.2 | 1.5 | 2.1 | 1.5 | 1.5 | 3.70 | 4.70 | 5.2 |
| HONY CHAN Banc One Investment Advisors | 1.8 | 1.0 | 1.4 | 1.4 | 1.4 | 1.8 | 3.80 | 4.75 | 5.0 |
| ERT A. BRUSCA The Nikko Securities Co. | 0.8 | 1.0 | 1.1 | 1.6 | 1.1 | 3.1 | 4.20 | 5.40 | 5.5 |
| ERT McGEE Tokai Bank Ltd. | 2.0 | 1.5 | 1.0 | 0.0 | 1.1 | 1.3 | 3.00 | 4.25 | 5.0 |
| IP BRAVERMAN DKB Securities (USA) | 1.0 | 0.5 | 1.0 | 1.5 | 1.0 | 1.0 | 3.50 | 4.00 | 5.1 |
| I LIPSKY Chase Manhattan Bank | 0.0 | 0.0 | 1.7 | 2.3 | 1.0 | 1.3 | 3.50 | 4.50 | 5.0 |
| ARD YARDENI Deutsche Bank Securities | 2.2 | 1.5 | 0.0 | -1.0 | 0.7 | 1.0 | 3.00 | 4.00 | 4.8 |
| LIAM A. BROWN J. P. Morgan | 1.0 | -1.0 | -2.0 | 1.5 | -0.1 | 2.0 | 3.05 | 4.75 | 5.7 |
| ALD R. REUSS Piper Jaffray | 0.5 | 0.0 | -1.0 | -2.0 | -1.5 | 0.5 | 3.25 | 4.50 | 5.5 |
| SENSUS | 1.9% | 1.6% | 1.9% | 2.2% | 1.9% | 2.1% | 4.11% | 5.08% | 4.9% |

do not rule out the possibility of a recession in the event of another global financial shock, given that domestic demand will be far less capable of offsetting any damage.

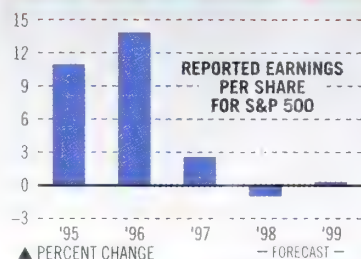
On the inflation front, the Business Outlook editors look for the consumer price index to rise a modest 1.9%, up from an expected 1.4% in 1998. Cheaper oil will help keep the rate low, but the broader impact of the trade-weighted dollar's 10% drop since August will halt the decline in import prices. And they expect the unemployment rate to rise to 5.2% by yearend, from an expected 4.5% at the end of 1998, as GDP growth slows to a rate below the economy's long-term trend of about 2½%.

EARNINGS GLOOM. Maureen Allyn at Scudder Kemper Investments Inc. sums up the feeling of most economic analysts: "First of all, the economy's recent rate of growth is simply not sustainable. And second, companies are having more and more trouble making their profit numbers." Allyn and others note that shoppers are spending far more than they earn. Builders are putting up more houses than demographics justify. And businesses are adding production capacity faster than they need it.

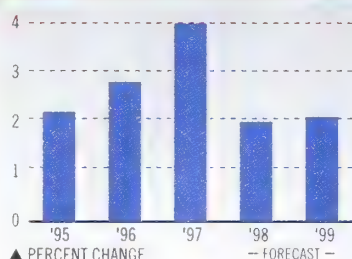
Profits are a major concern. Among those who project corporate earnings, the consensus is that reported earnings per share will be virtually flat in 1999 (chart)—a far more pessimistic view than that of Wall Street analysts, who expect a 17% gain (page 94).

The profit story, most economists believe, will be a continuation of the one in 1998. Labor costs will not be offset by productivity, and pricing will remain weak because of excess capacity in the

ECONOMISTS SEE A GLOOMY PROFITS OUTLOOK...



...AS WORLD GROWTH REMAINS SUBDUED



DATA: BUSINESS WEEK SURVEY, OECD ECONOMIC OUTLOOK

U.S. and abroad. "It will be difficult to expect any material increase in corporate profits until the differential between wages and prices narrows appreciably, or until global demand picks up," says Anthony Chan at Banc One Investment Advisors in Columbus, Ohio.

Sagging profits will hurt in several ways. They will dampen capital spending and job growth as companies are forced to cut costs. "Reversals in profit growth, the likes of which we have seen during the past year, have always

been followed by a major economic slowdown," warns James W. Coor at Columbus-based Huntington National Bank.

The hope is that profits make a comeback later in the year. Rosalyn M. Cahn at Credit Suisse First Boston notes that 1998 earnings shortfalls were mainly in industries with weak pricing power, such as oil and other commodities. "Stabilization of prices in those markets in 1999 should stabilize prices in those industries and let strength elsewhere show through," she says.

By the end of 1999, though, the damage to capital spending from weak profits will already be done. Adding slower growth in the U.S. and tighter credit conditions, and falling capacity utilization, and it's easy to see why capital spending is the most vulnerable sector of domestic demand. Business construction already is faltering. And when you exclude the still rapidly growing high-tech component of equipment spending, you have a much weaker picture for "plain-vanilla" equipment, says Kenneth Mayland at KeyCorp in Cleveland. His advice to the Midwest: "Brace yourselves."

THE GLOBAL EFFECT. Moreover, U.S. companies won't get much help from foreign demand. "The soft global economy is—and will remain—the most serious constraint on the U.S. economy through 1999," says Mark Zandi at regional Financial Associates in West Chester, Pa. Shaky global financial markets already have proved that they can bring down U.S. markets, and the effects will linger. Global events in 1998 caused a broad reassessment of risk among investors and lenders in credit markets, and that resulted in

FORECASTING

And the Winner is...

Economists have all kinds of computer models and logarithms. But sometimes a forecast depends on personal observations. Such was the case for Joseph R. Liro, the most accurate forecaster for 1998. Liro, who was chief economist for CIBC Oppenheimer Corp. until he joined the Princeton (N.J.)-based economic consulting firm of

Stone & McCarthy Research Associates in March, turned in the most correct forecast: He predicted strong economic growth in the U.S. would be paired this year with no rise in interest rates.

Liro was confident about domestic demand, especially in services, so he felt the overall U.S. economy would stay strong. The driving force for his 1998 interest-

rate and inflation outlook, he says, was a trip to Asia in October, 1997. "People in the States were too sanguine about the impact of Asia on the U.S.," Liro says. "During the trip, I saw how bad things were." The global crisis, he reasoned, would hold down goods prices, even while domestic demand grew strongly. And mild inflation meant that interest rates would stay low.

Looking at 1999, Liro, 50, sees some storm clouds ahead. Real gross domestic product will grow by 2.1%,

he predicts, with a mild slowdown early in the year. "We're going to see a dip in the first half when consumers will retrench," he says. At the same time, projects in business and housing will slow, and foreign trade will really drag on growth. As for the kind of profits growth in 1999, Liro's answer is blunt: "No way in hell."

As for the much-debated Y2K problem, Liro is worried—but not specifically about computers. He thinks that financial institutions

available and costlier credit for U.S. businesses, especially for those with less-than-sterling ratings. Moreover, banks are tightening their lending standards for most businesses. Foreign weakness also adds to Corporate America's earnings woes. Deflationary winds from abroad are sapping U.S. pricing power, while falling exports push manufacturing ever closer to outright recession. Factory output has all but stopped growing, and manufacturers have shed more than a quarter-million jobs since April.

For 1999, the news for manufacturing only gets worse. Economists expect a further widening in the already huge U.S. trade deficit—although not as badly as in 1998. The problem, says Robert A. Brusca of Nikko Securities, is that imports grow about 2.5% every 1% of domestic growth. So foreign growth must be much stronger than growth in the U.S., just to keep the deficit from widening. But world growth will be no better than that in the U.S. (chart). The result: "We do see a bottoming in the trade deficit in the next recession," says Brusca. With foreign trade and capital spending under heavy pressure, economists look to consumers to save the economy—and they just might. In 1998, consumer spending surged 5%, though prices rose just 3%. "The difference in 1999 will be that spending will grow less than income, not in excess of it," says Daniel E. Fenberg of American Express Financial Advisors. But with job market set to loosen only gradually, and with low inflation boosting buying power, consumers are likely to stop spending. And even if outlays are cut at only half their

back from lending in 1999 because they will see how borrowers behave over the next millennial commences. In his mind, consumers will only want to spend on people they are sure are compliant. As a result, he says, "mini-credit

professional background in all economics. The native started as a research assistant at the Federal Reserve in New York. And after earning a doctorate in economics

in 1998, that rate will be enough to keep the economy moving.

But even the consumer sector is not risk-free. Because of the soaring stock market and the resulting additions to wealth, consumers are spending all of their income. The household savings rate actually fell below zero in 1998 for the first time since the Depression. That dearth of traditional savings leaves households vulnerable to a fall in stock prices. While the Fed's rate cuts have calmed the markets, they also have boosted stock values. William C. Dudley of Goldman, Sachs & Co. points out: "Fed easing might sustain consumer spending in 1999, but only at the expense of an even greater savings imbalance." That could be setting up a tougher adjustment later. If consumers pack it in, a recession is all but certain.

BRAZILIAN TREMORS. That's a big risk, but it's not the only one. "Collapsing confidence in Japan, further commodity-price pressures on Latin America, a possible rise in protectionism, and a Brazilian devaluation are all possible catalysts for a recession," cautions Richard C. Berner at Mellon Bank

WORST CASE

A recession remains possible, and a number of scenarios could trigger it: A devaluation by Brazil, a collapse in confidence in Japan, or more commodity-price pressure in Latin America

Corp. Brazil is the top worry. "In the next six months, Brazil must roll over some \$90 billion in debt," says former Fed Governor Lawrence B. Lindsey. The recent International Monetary Fund package will guarantee only about half that much, and the country already is backpedaling on needed fiscal reform.

Japan is another basket case. It is at least making policy moves to lift itself out of a severe recession and to address

its debt-ridden banks. But a recent survey shows Japanese businesses are the most downbeat in 4½ years. And even in Europe, growth is expected to slow. High unemployment will keep a lid on domestic demand and, amid sagging world growth, an export-led recovery is not an option. Elsewhere, the global collapse in commodity prices has left commodity-producing nations with little hope for growth. Weak oil prices are putting Mexico at particular risk.

Despite the caveats, most forecasters believe that the economy will muddle through 1999. After all, monetary policy is supportive, and the federal budget surplus leaves room for a tax cut, needed or not. With a little luck, this expansion, which began in March, 1991, will fly right along into the next millennium, becoming the longest business upturn in the postwar era. But keep that seat belt buckled.

By James C. Cooper
and Kathleen Madigan
in New York



STORM CLOUDS AHEAD: Liro sees slowing business investment

Liro joined Stone & McCarthy at the invitation of his longtime friend and company founder, Raymond W. Stone. The firm specializes in economic and investment forecasting. If Liro's economic forecasting remains as savvy as it was this year, Stone & McCarthy's best call in

1998 may well have been offering him a job.

By Kathleen Madigan
in New York

at Syracuse University, Liro worked at the New York State Financial Control Board, and S.G. Warburg &

Co. He lives in Summit, N.J., with his wife, Joanne Hill, a derivatives analyst for Goldman, Sachs & Co.



— — — — —
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STEERING WITH BOTH HANDS ON THE WHEEL

Polymakers know that one false move could upset a fragile world economy

For politicians and policy-makers around the world, 1999 is shaping up as a year of high ambitions—and high anxiety. Washington hopes to spend the year overhauling Social Security's creaky finances and structure. European leaders, after uniting their major currencies into one on Jan. 1, will move to cut unemployment while knitting the Continent into one vast economy. Tokyo at last is hearing—and may even start heeding—calls for bold action to rescue Japan's failing banks and pull its businesses out of a seven-year slump. And for the other crisis countries of Asia, 1999 is the year they can hope their economies will stop shrinking and they can start repairing their banking systems and industries.

Leaders know, however, that those great expectations could be shattered. With the World Bank predicting that developing countries will post only 0.4% per capita growth—and that output will shrink in Brazil, Russia, and 34 other countries—industrial nations like the U.S. are shadowed by the risk of recession. After the Asian crisis of 1997 and the Russian default of 1998, financial markets and businesses remain wary that another misstep in Seoul, Brasilia, Moscow, or New York could tip a fragile world economy. Little wonder that, even as they stress their positive outlook for the U.S., top Federal Reserve officials caution that they're "watchfully waiting" for danger signs at home and abroad.

Central banks are already acting to



CARDOSO

Brazil's president has been unable to push through key budget measure



DUISENBERG

His European Central Bank makes its debut on Jan. 1

inoculate their economies. The Fed's three rate cuts in seven autumn weeks eased investors' fears and reduced—but didn't eliminate—the rate premiums lenders demanded from every borrower except Uncle Sam. Eleven central banks in Europe followed on Dec. 3, cutting rates to 3% (3.5% in Italy) in what could be their last independent act before Wim Duisenberg and his new European Central Bank take charge on Jan. 1. Treasury Secretary Robert E. Rubin and his deputy (and likely successor), Lawrence H. Summers, hope that the \$41.5 billion international defense package they've cobbled together for Brazil's economy will halt the turmoil in emerging markets.

For the U.S., these moves ought to ensure that the economy suffers nothing worse than a slowdown in 1999. The consensus forecast of economists surveyed by BUSINESS WEEK—1.9% growth, down from about 3.3% in 1998, with consumer inflation up to 2.1% from 1998's 1.6% (B-82)—squares with several Fed officials' expectations. Unless something else goes wrong in the world economy, it looks to us like the U.S. will simply be slowing gently," says Vice-Chair Alice M. Rivlin.

To hit those numbers—and off the third "soft landing" of Greenspan's 11-year Fed chairmanship—the Fed will probably have to cut its key federal rate, now 4.75%, by an additional half-point in 1999. But no meeting at the central bank's Dec.

22 meeting.

MIDDLE GROUND. Washington politicians are counting on that benign outlook to give them time to pursue their projects, Social Security reform and tax cuts. The two are linked by a tight spot of money—the budget surplus projected to total \$80 billion in fiscal 99 and \$1.5 trillion over the next decade. President Clinton's election-year slogan "Save Social Security First" effectively barred Republicans from parceling out the surplus in tax cuts, blocking the \$80 billion package that the House passed in September. But now, Clinton has to deliver on Social Security.

The outlines of a reform plan are clear. On Dec. 9, Clinton told con-

WHAT TO EXPECT FROM WASHINGTON ON KEY ISSUES IN 1999



MONETARY POLICY The Fed frets about lingering tight credit in the wake of last summer's market melt-

downs. Look for up to two more cuts in the federal funds rate. Another overseas crisis would push the Fed into firefighting mode to pump out liquidity.

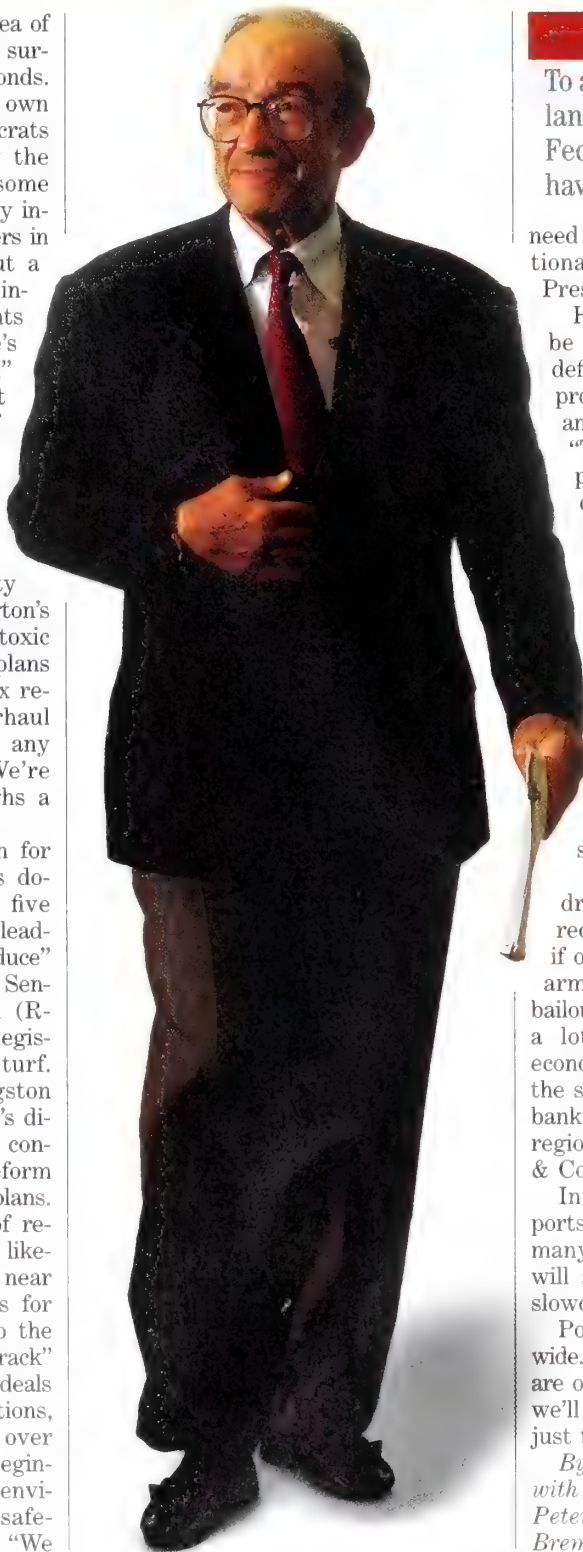


SOCIAL SECURITY Plenty of the little opportunity for action. Clinton is willing to invest surplus in the stock market, but liberal Democrats are balking at demands that workers run their investments.

nal leaders he would back the idea of vesting part of Social Security's surpluses in stocks and corporate bonds. The contentious question is who'll own those investments: Liberal Democrats say the government should buy the shares, while Republicans and some moderate Democrats insist that any investments should be held by workers in (k)-style private accounts. But a bill that combined government investing with small private accounts would satisfy both sides. "There's clearly a potential middle ground," says John C. Rother, chief lobbyist for the American Association of Retired Persons.

But the White House and Congress may never find an acceptable route to that compromise. The partisan distrust that normally surrounds Social Security may only be deepened by Washington's attachment struggle. The same toxic will probably kill the GOP's plans for big tax cuts, such as estate tax relief. If the Social Security overhaul passes, Clinton will dig in against anything more than token tax relief. "We're holding each other hostage," sighs a GOP aide.

RISKS. That poses a problem for Republicans who fret that 1998's debt ceiling Congress cost the party five House seats last November. "The leadership understands they must produce" a bill to keep control in 2000, says Sen. Charles T. "Chuck" Hagel (R-Iowa). But producing may mean legislating largely on Democratic turf. House Speaker-elect Bob Livingston (La.) will spurn the hard Right's divisive social issues and press for conciliatory versions of education reform, patient protections in health plans. Still, Democrats, with visions of reuniting Congress in 2000, aren't likely to meet Livingston anywhere near the way. That could be bad news for Clinton, which is hoping to help the Clinton Administration win "fast track" negotiating authority to cut trade deals in farm products, telecommunications, foreign investment. To win over Democrats, business lobbies are beginning to reach out to labor and environmental groups to agree on safeguards in any new trade pacts. "We



GREENSPAN

To achieve yet another "soft landing" for the U.S., the Federal Reserve will probably have to cut rates again in 1999

need to be prepared to talk," says National Association of Manufacturers President Jerry J. Jasinowski.

Hanging over any trade votes will be a massive and growing trade deficit: The current-account deficit is projected to hit \$220 billion for 1998 and could top \$300 billion next year. "The likely outlook for the U.S. is positive," says Janet L. Yellen, chair of the White House Council of Economic Advisers, "but the risks from overseas are unusually high."

CRUNCH TIME. What risks? Brazilian President Fernando Henrique Cardoso's setbacks in winning budget and tax hikes—needed to keep support flowing from the International Monetary Fund—have spooked global investors and halted the recent drop in risk premiums. A run on Brazil could send rates soaring around the world.

Japan's credit crunch, which is driving corporate bankruptcies to record highs, could turn into a panic if officials can't persuade—or strong-arm—reluctant bankers to accept bailouts. Banks elsewhere in Asia need a lot of work, too: "How quickly economies will rebound will depend on the speed with which they fix up their banking systems," says Sun Bae Kim, regional economist for Goldman, Sachs & Co. in Hong Kong.

In Europe, growth is slowing as exports to Asia fall. Businesses in Germany and the other 10 nations that will share the euro fear that a U.S. slowdown will hurt their prospects.

Potential hot spots abound worldwide. If it's any comfort, central bankers are on the alert. But if things go wrong, we'll be counting on Greenspan & Co. just to get through another year.

By Mike McNamee in Washington, with Ian Katz in São Paulo, Thane Peterson in Frankfurt, and Brian Bremner in Tokyo

TAXES The GOP is hot to cut, cut, cut—the tax-relief tally runs to \$600 billion or more over the next year. But Clinton's "Save Social First" mantra will pack even if pension system goes down.

REGULATION Banking reform will be back, with new Senate Banking Committee Chair Phil Gramm pushing a hands-off approach to



merging financial services. The SEC will target inflated corporate-earnings accounting.



BUDGET The surplus is too tempting to be left alone. After sneaking around spending caps with "emergency" spending this fall, Congress may screw up the courage to drop or soften the budget limits.



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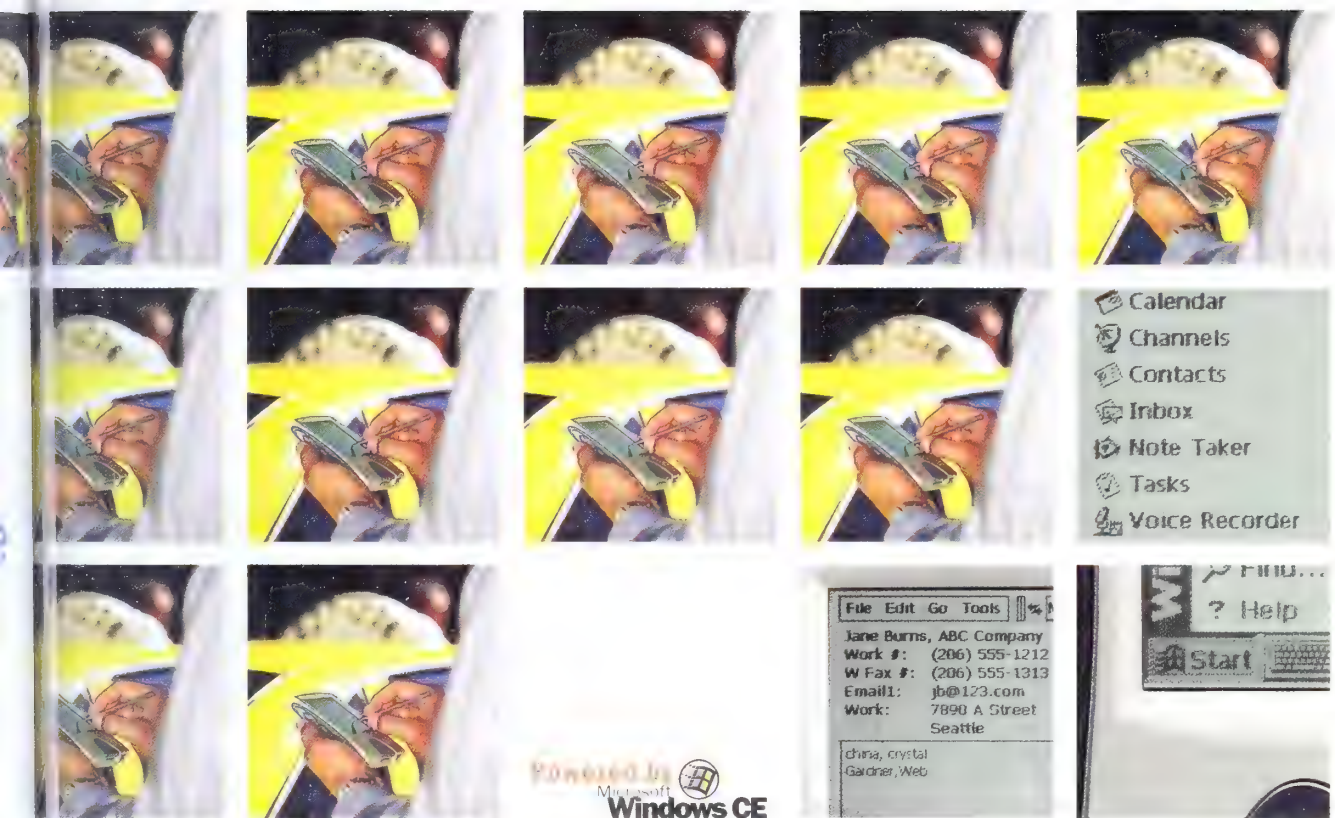
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THE OLD RULES STILL APPLY

Consider your personal time frame and appetite for risk. Then hedge accordingly

As you decide how to allocate your assets in 1999, don't dwell on the false lessons of 1998. If you do, you could end up with a portfolio that's sorely out of balance.

Letting 1998 be your only guide, you might conclude that the S&P 500 is the only game in town—and that small-cap stocks, emerging-market stocks, and high-yield bonds are financial sinkholes. You might think that diversification doesn't reduce risk, because in this past year, investments that were supposedly independent of each other fell in sync. And you might also decide that bear markets are nothing to worry about because when prices plunged this fall, they snapped back within weeks.

Wrong, wrong, wrong. Experts on asset allocation say that investors should resist the temptation to base their decisions on one crazy year or to chase after the latest hot ticket. Instead of speculating on what's going to do well in 1999, rely on some time-tested principles of investing. First, divide your money among a variety of assets, including ones that have bombed lately but might snap back, like small-cap stocks. Second, unless your outlook is resolutely long-term, put some money in safer holdings like government bonds—contrary to recent experience, bear markets can last an agonizingly long time.

COMFORT ZONE. Putting every penny of your 401(k) money into large-cap stocks tempts a lot of people. The company names are reassuringly familiar, and the returns have been excellent in recent years. "Every adviser I talk to has trouble getting people into things like small-cap and foreign," says Jeffrey B. Schwartz, senior consultant for Chicago-based Ibbotson Associates, which provides investment software and consulting. No wonder: For the 12 months ended Nov. 30, the total return



SMALL CAPS? TREASURIES? HERE'S THE HISTORY

Annualized returns through November, 1998

| | LAST
1 YEAR | LAST
5 YEARS | LAST
10 YEARS | LAST
20 YEARS |
|--|----------------|-----------------|------------------|------------------|
| U.S. SMALL-CAP STOCKS | -11.1 | 13.0 | 13.4 | 16.0 |
| STANDARD & POOR'S 500 | 23.7 | 23.0 | 18.7 | 17.5 |
| DEVELOPED-NATION STOCKS* | 16.8 | 10.2 | 5.5 | 13.8 |
| EMERGING-NATION STOCKS** | -19.7 | -7.0 | N/A | N/A |
| LONG-TERM U.S. CORPORATE BONDS*** | 12.4 | 8.9 | 10.9 | 10.8 |
| INTERMEDIATE-TERM U.S. GOVERNMENT BONDS | 11.0 | 6.2 | 8.7 | 9.9 |
| 30-DAY U.S. TREASURY BILLS | 5.0 | 4.9 | 5.3 | 7.2 |

*Morgan Stanley Capital International EAFE Index

**International Finance Corp. Emerging Composite Index

***Salomon Brothers Long-Term High-Grade Corporate Bond Index

SOURCE: IBBOTSON ASSOCIATES

he Standard & Poor's 500-stock index was 23.7%, vs. 16.8% for a Morgan Stanley Dean Witter index of developed-economy stocks, -11.1% for an Ibo index of small stocks, and a -19.7% on an International Finance Corp. emerging-markets composite index (table).

At 20-year return differences aren't nearly so stark. And by going wholeheartedly into large caps, says Mark W. Riepe, vice-president in charge of Charles Schwab & Co.'s Center for Investment Research, "in essence, you're repeating that the recent past will continue into the future." As Riepe says, "large-cap stocks have not altered the universe. In the late '80s, small caps were the place to be. Throughout much of the '80s, international stocks were the place to be."

HT TEST. Diversification hedges bets. When one asset class does poorly, another usually will be doing better. At first glance, the planetwide downturn in 1998's third quarter seems to disprove that principle. Investors as Long-Term Capital Management, the Greenwich (Conn.) hedge fund, spread their bets among various currencies and asset classes, only to have them lose value at once. Most of the time, though, the major asset class doesn't move in lockstep like that for long. Even during this past year's turn of events, the most typical diversification strategy was still a big winner: Investors who put some of their money in Treasury bonds did very well on an offsetting losses elsewhere.

When you think about allocating assets for the new year, consider your tolerance for risk. Think back to when the Jones industrial average was down 7,500. If you sold stock during a cash-out or even thought hard about it, it's evidence that the ratio of stocks in your portfolio is too high for the market, says Scott Lummer, chief investment officer of San Francisco's Forum Inc., which advises retirement-plan participants.

Anytime people were saved from selling at a loss only by the brevity of the downturn. The next time could be different. Says Ibbotson's Schwartz: "People have made so much in the past five years that chances are, as soon as we have a prolonged bear market, we're going to see a massive outflow. They'll have made so much. I'm not prepared to lose it."

Whether you bail out or not has a lot to do with the second key factor in asset allocation: how soon you'll need

FOR THE RECORD

Myra R. Drucker is chief investment officer for Xerox, which pools employees' 401(k)s with pension funds to get volume discounts on money managers' fees

ON WHETHER EMPLOYEES ALLOCATE ASSETS

SENSIBLY: "Most of them do a rational job. The marginal movements, however, are always made in the wrong direction. What you see is performance-chasing, though it's not with huge amounts of money."

ON HOW ALLOCATIONS GET

SKEWED: "I'm worried that people let their equity allocations creep upwards in the great bull market without really understanding the amount of risk they're taking."

ON GAUGING ONE'S TOLERANCE FOR RISK:

"I would encourage people to do an exercise in imagination. People should think about their reaction to [the third-quarter market drop]. For many investors, that was the first time they had ever experienced more than a few days' decline in the equity market."

ON KEEPING EMPLOYEES FROM MAKING BAD CHOICES:

"We educate. We don't give advice. You cross the line when you give explicit direction on an individual's account."



"I'm worried that people let their equity allocations creep upwards"

the money. It's easy for a 30-year-old to be brave when her retirement account is down because there's plenty of time for it to recover. Not so for a 60-year-old. Investment advisers say that if you will need your money in less than five years, you probably shouldn't have more than 60% of it in stocks.

Here again, though, the experience of 1998 could lead some investors in the wrong direction. The rapid rebound of this past fall may persuade people that diversifying away from stocks would be foolish—akin to passing up free money. The people most at risk of making such a mistake and overcommitting to stocks are those who feel they can't achieve their investment goals without getting the very highest returns. Says 401(k) Forum's Lummer: "You deny the fact that there's actually risk in the market. When that risk reveals itself, fear takes over. You sell, and lock in your losses."

Another reason to diversify into bonds is that their returns are actually quite respectable. Over the past 20 years, long-term U.S. corporates and intermediate Treasuries have both provided roughly 10% annual returns (table). If you do decide to move more of your money into fixed income, remember that not all debt is created equal. Junk bonds, for instance, may

have attractive yields, but they are at least as volatile as stocks. If safety is the goal, think of short-term bonds or even money-market funds, which invest in safe, low-yield securities like Treasury bills.

FOREIGN ADVENTURE? There are a few points on which asset-allocation experts disagree. One is whether emerging markets belong in a balanced portfolio. Skeptics say that it's not clear whether they add meaningfully to a portfolio's diversity. However, Lou Rowan, national sales director for Tacoma (Wash.)-based adviser Frank Russell Co., says: "The emerging markets are roughly analogous to late 19th century America. That would have been a very good investment, wouldn't it?"

Whatever their disagreements heading into 1999, asset-allocation experts share a view that the worst thing investors can do is pour all their money into the latest investing fad. Yet many do exactly that. Says Rowan: "The individual investor is missing out on what pension-fund managers learned painfully in the late '60s and early '70s: setting long-term goals and implementing them in a well-diversified fashion." That's not a brand new idea, perhaps. But with 1998's roller-coaster ride still fresh in our minds, it's as timely now as ever.

By Peter Coy in New York

ST BET

★ SPREAD THE WEALTH Instead of putting all your chips on large-cap U.S. stocks, hedge your bets by spreading your money among a variety of assets, including fixed-income securities and foreign stocks.

A SLOWER GAIN IS BETTER THAN NONE

Don't look for miracles, but a surprise profit revival could give the market a nice lift

Despite the stock market's rebound from the summer lows, there's an unsettling element about it. True, the global financial crisis that precipitated the almost 20% plunge in the blue-chip averages seems to have receded. But even before the plunge, the growth rate of U.S. corporate profits, one of the principal engines of the long bull market, was slowing to a crawl and making the high valuations suspect. "When you look at the fundamentals today vs. June or July, they're worse," says Richard Bernstein, chief of quantitative research at Merrill Lynch & Co. "Earnings growth is negative. We're in a profits recession."

Does that mean the stock market is heading south? Not at all. The big surprise of the new year: Profits will be better than Bernstein and many others think and certainly a lot better than 1998, which is unlikely to show any growth over 1997.

That will translate into higher stock prices. Don't look for a reprise of the 30%-plus gains of 1995 and 1997, or even this year's 19.8% on the Standard & Poor's 500-stock index (through Dec. 15). True, the Dow Jones industrial average's 550-point pullback over the last few weeks—a product of profit worries and the impeachment showdown in Washington—makes Dow 10,000 a little more distant. Still, a modest 10% gain in the Dow next year would get it above 9700.

MAJOR BLOWUPS. The case for higher earnings starts with a close examination of 1998 profits. For instance, the three largest sectors of the S&P—finance, technology, and energy—each had a major blowup. Early in the year, technology earnings got slammed as companies worked down inventories

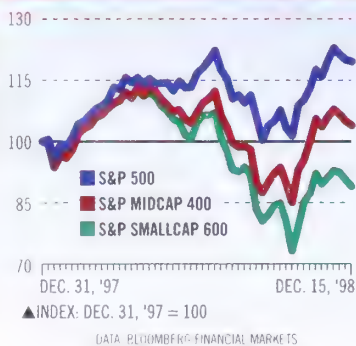
and retooled for new products. The financial companies, mainly banks and brokerage firms, hemorrhaged in the third quarter. That was largely related to write-offs of Russian debt and bad hedge-fund loans. And profits in the energy industry evaporated as oil prices sank to the lowest level in 11

years. That's not all. The General Motors Corp. strike shaved about 1% from earnings, and the strong dollar that reigned from January through April gust put a crimp in the big multinationals that dominate the S&P 500. Edward M. Kerschner, investment strategist at PaineWebber Inc., estimates that 40% to 45% of S&P earnings come from outside the U.S.

Now, consider 1999. Earnings are the upswing in technology—one area where analysts are marking up forecasts. "You can get 25% earnings growth in the tech sector alone," says strategist Peter J. Canelo of Morgan Stanley Dean Witter, who says S&P earnings could log a 9% to 10% gain next year. Financial companies are always at the mercy of the markets, but one thing they won't have to do next year is write off this year's mess. With the stock market recovery, the renewed mergers-and-acquisitions boom, and a pickup in initial public offerings, the earnings should improve considerably.



LARGE CAPS LEAD, WHILE OTHERS LAG



energy? No bright outlook there, Kerschner estimates that if the of decline in energy prices is only as severe as in 1998, it could add 1.9 percentage points to S&P earnings. If that doesn't happen, there is an t: Falling energy prices mean high- profits for airlines and truckers and n discretionary spending for coners. And if the dollar remains at ent levels, it could add another 2 percentage points to S&P earnings over 's, says Kerschner. If the dollar lower, earnings get a bigger boost.

BLACK HOLE? That's a lot of ifs, and if they all work out,

the are always some p lems that could take markets by surprise. E onomic woes in Brazil a: Russia have the poten- ti to roil markets again, a: the Year 2000 computer is e will come into ever- sh per focus as the count- n to the millennium g: from months to days. ue, Y2K expenditures costing companies bil- . But it's not a black h as most investors be- li, says Thomas Galvin, stment strategist at D aldson, Lufkin & Jen- e Inc. "About 70% of f: s have replaced systems r: er than fix them," he s. "The key to increasing p: it margins is better a: gement of your supply e: , and if you've upgrad- e: r Y2K, you've done that a: well." Significant tech- n: gy spending, he adds, u: ally leads to a produc- t: y-led expansion in prof- it margins. Galvin forecasts a: yady 13% gain in S&P p: ts.

ost investors are far optimistic than Galvin about next 's earnings. Wall Street strategists d by BUSINESS WEEK are, on aver- a: forecasting a tepid 3.4% gain in i: for the companies in the S&P 500 (p: e 98). Economists take an even n: e jaundiced view: They predict only a: icroscopic gain of 0.1% (page 82). L: king at the S&P "bottoms up" fore- c: s—by analysts for companies that a: in the index—the numbers are h, up 17%. But that's typical for an- a: t forecasts at the start of the year. T: se numbers are inevitably shaved a: ne year goes on.

Nor are the portfolio managers at large institutions that control billions of dollars in equity funds optimistic about earnings. Galvin says one poll shows a majority of the firm's institutional investor clients expect earnings in the -5% to 5% range. "Seventy percent of my clients think we're in a bear market," says veteran investment strategist Elaine M. Garzarelli of Garzarelli Capital Inc. "That's because they're looking at what earnings are now, and that's not important." She says the market has long since discounted the current earnings weakness

FOR THE RECORD

Elaine M. Garzarelli, who made her name while forecasting for big Wall Street firms, now runs Garzarelli Capital Inc.

ON THE STOCK MARKET: "We're looking for 1400 on the S&P 500, or 11,000 on the Dow, over the next 12 to 18 months. Any correction will be limited, an opportunity to buy."

THE REASON FOR THE BULLISH FORECAST: "Earnings will be stronger in the second half of 1999 as the Fed's easing works its way through the economy. Meanwhile, companies are laying off workers and reducing costs. When the upturn comes, you get a big boost in productivity and profits. We also expect interest rates to continue coming down,

with the 10-year U.S. Treasury bond going to 4%."

THE BEST SECTORS: "Newspapers, hotels, homebuilders, banks, and electronics should all do well—about 50% better than whatever gains the broad market makes."



WHAT COULD MAKE HER BEARISH: "Higher inflation, higher interest rates, Fed tightening. Maybe that would happen if Asia started booming. Slim chance of that. We'd also worry if the market moved up very fast without rates dropping concurrently."

"Any correction will be limited, an opportunity to buy"

and is rising in expectations of the profit recovery she thinks will be evident by the second half of 1999. Garzarelli, who turned bullish right before the market took off in October, is aiming for 1400 on the S&P in the next 12 to 18 months from today's 1163. That's equivalent to about 11,000 on the Dow.

Dow 11,000? After the last few weeks, that sure seems like a stretch. And even if it gets there, the trip will be jarring. PaineWebber's Kerschner says the Dow's average daily price change in 1998 is 0.92% up or down, 33% greater than the average for the

past three decades and the highest level of volatility since 1987. What that means, he says, is that a 60-point move on any day and a 150-point move once a week is just business as usual.

Even if you can stand the volatility and you agree that profits will improve, large-cap stocks are not undervalued. Investors with a little more appetite for risk will find better bargains among the midcap and small-cap stocks. These companies, which historically traded at price-earnings ratios above those of the large-cap stocks, are currently boasting p-e's that are below the S&P's. That's

because their stock prices have lagged badly. Through Dec. 15, the S&P 500 climbed 19.8%, but the S&P MidCap 400 index managed a gain of just 4.2% and the S&P SmallCap 600 dropped 10.8%. The 30-stock Dow, which doesn't have dynamic growth stocks such as Microsoft, Intel, and Cisco Systems, is up just 11.6%.

OVERSHADOWED. Midcap stocks, often overshadowed by both larger and smaller companies, offer some of the best earnings growth around. "Midcaps give you much of the same growth as small caps, but more liquidity," says Claudia E. Mott, director of small-cap research at Prudential Securities Inc. Indeed, the midcaps' 10.2% earnings gain in 1998 has been largely ignored, and the bottoms-up profit forecast for 1999 is nearly 19%. Expectations for small caps are even higher, yet the stocks continue to lag.

What might finally push small-cap companies ahead of the large caps in 1999 is

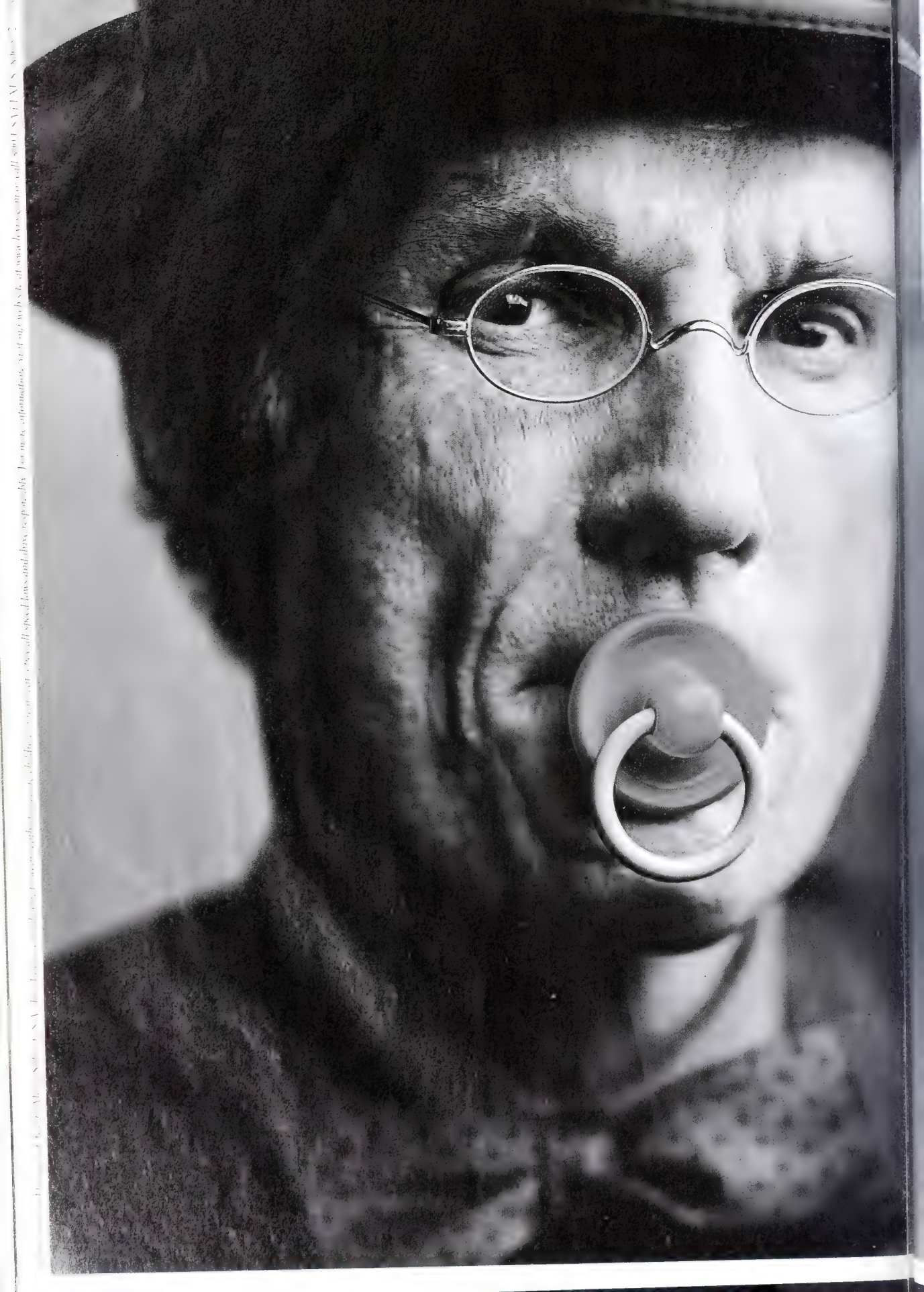
the Federal Reserve's monetary policy. When the Fed took short rates down by nearly three percentage points in 1991, small caps zoomed 45%. And smaller companies continued to beat large companies for two more years.

There's no telling how far the Fed will go in the new year, but the direction is down. And there's no question that lower rates are bullish for stocks. Add in a little better than expected earnings, and the market has fuel to keep climbing.

*By Jeffrey M. Laderman
in New York*

BEST BET

★ THE MIDCAP OPTION Midcap stocks, often overshadowed by both larger and smaller companies, may offer some of the best bargains around. They provide much of the same growth as small caps but more liquidity.



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THE RELENTLESS PURSUIT OF PERFECTION.  LEXUS

ONCE MORE INTO THE BREACH . . .

The pros see modest stock gains—again. Slowing profits may finally vindicate them

Once again, the bull outran Wall Street's expectations. For the second straight year, the major stock indexes closed far above the consensus forecast of 45 market strategists BUSINESS WEEK surveyed last December. Even the Dow Jones industrial average—which at 8823.3 on Dec. 15 was up less than half as much as the technology-heavy NASDAQ—managed to rise 4.5 percentage points more than the pros believed it would. But far from being emboldened by their history of excessive restraint, on average Wall Street's investment gurus are forecasting modest gains for 1999, with the Dow expected to reach 9567 (up 8.4%), the Standard & Poor's 500-stock index 1230 (up 5.8%), the NASDAQ 2081 (up 3.4%), and the Russell 2000 index 432 (up 10.9%).

Like last year, analysts see plenty of reasons to be less than exuberant. One of the main supports for stocks, corporate profits, is caught in a vise created by tight U.S. labor markets and global overcapacity. Squeezed by rising wages and falling prices, earnings will rise a lackluster 3.5% in 1999, the consensus says. At the market's current lofty level, even bull Peter J. Canelo of Morgan Stanley Dean Witter calls it slightly overvalued. But with energy prices at a 12-year low, Canelo thinks inflation can fall below 1%. That would make stocks cheap at today's prices, he says.

PINK SLIPS. Others say stocks will be rescued by the American worker, at whose expense companies have carried out past campaigns to cut costs and boost profits. "We will see layoffs that could make 1999 the single biggest year" for pink slips in the '90s, says BankBoston's Ned Riley. Riley sees the 4.4% jobless rate exceeding 5% by next fall. Such cost-cutting could help corporate profits and stocks, but only if the engine of global growth, the Amer-



A CLAWING AHEAD?

Many tech stocks are high.

"There is a bubble of sorts—no question about it," says BankBoston's Ned Riley. The evidence: rich p-e ratios for Dell, Microsoft, and Cisco

ican consumer, doesn't get too spooked.

The outlook for interest rates, the other key determinant of stock prices, is brighter. With inflation tame and the Federal Reserve more likely to relax than tighten monetary policy, rates will

stay enough to "offer some underpinning

the market," says Jerry Dombek of McDonald Investments. By year's end, analysts see little change in the current 30-year Treasury yield of 5%.

Of course, a shock could dent everything. Although most analysts expect volatility to ease as Asian economies mend, some think worse than expected Y2K compliance could cause another bear market scare. And with stocks expensive by most standards, any bad news increases "the likelihood of a sell-off," says Barry Hyman of Ehrenkrantz King Nussbaum Inc. Indeed, pessimists look for stocks to drop by as much as 35%.

But for now, most pros have faith in the Fed's ability to calm global

BUSINESS WEEK MARKET FORECAST SURVEY FOR 1999

| | DOW JONES
INDUSTRIAL AVERAGE
MIDYEAR | DOW JONES
AVERAGE
YEAREND | STANDARD &
POOR'S 500
YEAREND | NASDAQ
COMPOSITE
YEAREND | ASSET ALLOCATION
STOCKS BONDS CASH | | | FAVORITE
STOCK SECTOR | FAVORITE
STOCK |
|--|--|---------------------------------|-------------------------------------|--------------------------------|---------------------------------------|-----|-----|--------------------------|-------------------------|
| ASZLO BIRINYI JR. Deutsche Bank Securities | 10050 | 12010 | 1500 | 2800 | 90 | 0 | 10 | Technology | America Online |
| LAINE GARZARELLI Garzarelli Capital | — | 12000 | 1550 | 2670 | 60 | 40 | 0 | Financials | Merrill Lynch |
| DM GALVIN Donaldson Lufkin & Jenrette | 10100 | 11000 | 1300 | — | 75 | 20 | 5 | Technology | Merrill Lynch |
| DM McMANUS The Strategy Connection | 9800 | 10900 | 1375 | — | 70 | 30 | 0 | Cons. staples | Lowe's |
| SEPH BATTIPAGLIA Gruntal & Co. | 10000 | 10500 | 1300 | 2300 | 100 | 0 | 0 | Health care | Merck |
| ETER J. CANELO Morgan Stanley Dean Witter | 9250 | 10500 | 1325 | 2385 | 70 | 20 | 10 | Technology | Intel |
| HN K. LYNCH Interstate Johnson Lane | 9750 | 10500 | 1350 | 2400 | 60 | 25 | 15 | Technology | MCI WorldCom |
| IL ORLANDO Value Line Asset Management | 10100 | 10500 | 1400 | 2600 | 80 | 15 | 5 | Technology | Tellabs |
| LAN S. RONESS JW Genesis Securities | 9500 | 10500 | 1650 | 2700 | 100 | 0 | 0 | Technology | Medallion Fin. Corp. |
| ARE W. ZEMPEL Robert W. Baird & Co. | 9510 | 10365 | 1320 | 2365 | 65 | 25 | 10 | Health care | ADC Telecom |
| IGENE PERONI Janney Montgomery Scott | 9900 | 10200 | — | — | 100 | 0 | 0 | Technology | McGraw-Hill |
| ARRY HYMAN Ehrenkrantz King Nussbaum | 9850 | 10150 | 1280 | 2170 | 65 | 25 | 10 | Technology | AT&T |
| IGH JOHNSON First Albany | 9700 | 10100 | 1300 | 2175 | 58 | 42 | 0 | Technology | Sun Microsystems |
| IBERT S. ROBBINS Robinson-Humphrey | 9790 | 10062 | 1323 | 2294 | 70 | 25 | 5 | Technology | America Online |
| WARD G. RILEY JR BankBoston | 10000 | 10025 | 1293 | 2180 | 55 | 35 | 10 | Health care | Cambridge Tech Partners |
| CK JANDRAIN Banc One Investment Adv. | 9600 | 10000 | 1600 | 2200 | 60 | 40 | 0 | Health care | — |
| MES V. PIZZO CIBC Oppenheimer | 9500 | 10000 | 1275 | 2100 | 70 | 20 | 10 | Health care | United Healthcare |
| CK SHAUGHNESSY Advest | 9500 | 10000 | 1270 | 2180 | 60 | 30 | 10 | Technology | Fleet Financial Group |
| BERT H. STOVALL Stovall/Twenty-First Adv. | 9475 | 9999 | 1315 | 2775 | 70 | 20 | 10 | Health care | Allstate |
| BY JOSEPH COHEN Goldman Sachs & Co. | — | 9850 | 1275 | — | — | — | — | — | — |
| HN J. REGAN Josephthal & Co. | 7867 | 9832 | 1256 | 2186 | 95 | 0 | 5 | Technology | Cisco Systems |
| FREY M. APPEGATE Lehman Brothers | 9800 | 1250 | — | — | 80 | 20 | 0 | Technology | EMC |
| CHARD CRIPPS Legg Mason Wood Walker | 9500 | 9800 | 1250 | 2100 | 70 | 30 | 0 | Financials | Allstate |
| ARLES J. PRADILLA SG Cowan Securities | 9345 | 9800 | 1240 | 1330 | 60 | 35 | 5 | Health care | Eli Lilly |
| EG A. SMITH Prudential Securities | 10000 | 9800 | 1225 | — | 75 | 25 | 0 | Technology | BDK |
| WARD KERSCHNER PaineWebber | — | 9750 | 1250 | — | 63 | 23 | 14 | — | — |
| ZABETH J. MACKAY Bear Stearns & Co. | 8000 | 9650 | 1270 | 2000 | 60 | 35 | 5 | Services | Cerner Corp. |
| ARLES G. CRANE Key Asset Management | 8900 | 9600 | 1200 | 2200 | 65 | 30 | 5 | Financials | Key Corp. |
| FRED GOLDMAN A.G. Edwards & Sons | 10000 | 9600 | 1300 | 2000 | 100 | 0 | 0 | Energy | Transocean Offshore |
| THOMAS MADDEN Federated Investors | 10000 | 9500 | 1250 | 2200 | 60 | 40 | 0 | Utilities | Conseco |
| CHARD G. UNRUH JR. Delaware Investmts. | 8000 | 9500 | 1150 | — | — | — | — | Indus. cyclical | — |
| RY DOMBICK McDonald Investments | 8300 | 9400 | 1230 | 1900 | 75 | 20 | 5 | Technology | Elder-Beerman |
| UGLAS CLIGGOTT J.P. Morgan | 9000 | 9300 | 1200 | — | 60 | 25 | 15 | Cons. durables | Anadarko Petroleum |
| GER DeBARD Hotchkis & Wiley | 8677 | 9140 | 1081 | 1703 | 48 | 45 | 7 | Utilities | New Holland |
| TER ANDERSON Amer. Express Fin. Adv. | 8700 | 9100 | 1150 | 1900 | 70 | 10 | 20 | Utilities | Northwest Airlines |
| D CHALASANI EVEREN Securities | 11600 | 9100 | — | — | — | — | — | Health care | Burlington Resources |
| GENIA M. SIMPSON Kirkpatrick Pettis | 9300 | 9100 | 1175 | 2200 | 70 | 20 | 10 | Financials | Level 3 Commun. |
| RSNALL ACUFF Salomon Smith Barney | 8500 | 9000 | 1125 | 1900 | 47 | 48 | 5 | Health care | — |
| THONY F. DWYER Ladenburg Thalmann | 9800 | 9000 | 1125 | 2500 | 70 | 30 | 0 | Technology | Speedway Motorsports |
| VID A. HENWOOD Raymond James & Assoc. | 9900 | 8900 | 1140 | 1950 | 65 | 25 | 10 | Technology | ABR Information Svcs. |
| IN R. WILLIAMS Bankers Trust | 8800 | 8900 | 1165 | 2000 | 50 | 35 | 15 | — | — |
| RC DION Ziegler Asset Management | 7800 | 8400 | 1050 | 1700 | 50 | 40 | 10 | Health care | Becton Dickinson |
| LLIFFE, K. MILLS & K. PERRY Jurika & Voyles | 8400 | 8200 | 1050 | 1750 | 60 | 35 | 5 | Technology | AES Corp. |
| WARD NICOSKI Piper Jaffray | 7800 | 8200 | 1050 | 1850 | 20 | 50 | 30 | Health care | — |
| EPH H. BARTHEL Fahnestock | 9700 | 8000 | 1229 | 1900 | 80 | 20 | 0 | Technology | Placer Dome |
| B BROWN Ferris Baker Watts | 8249 | 7969 | 1009 | 1609 | 50 | 30 | 10* | Energy | Amerada Hess |
| N HAYS Wheat First Union | 9600 | 7500 | 950 | 1500 | 70 | 30 | 0 | Utilities | Amgen |
| RGE JACOBSEN Trevor Stewart Burton & Jacobsen | 7750 | 7000 | 850 | 1550 | 50 | 40 | 10 | Health care | HCR Manor Care |
| BERT F. DICKEY Dain Rauscher Wessels | 8200 | 6800 | 882 | 1500 | 50 | 30 | 20 | Energy | Schlumberger Ltd. |
| L MEEHAN Cantor Fitzgerald | — | — | 950 | 1500 | 45 | 35 | 20 | Energy | FDX Corp. |
| RAGES | 9268 | 9567 | 1230 | 2081 | 67% | 26% | 7% | | |

10% in gold

DATA: BUSINESS WEEK

STRATEGIES FOR STOCKS

FEARLESS FORECASTERS

ters: "We may have the second soft landing in five years," marvels Hugh Johnson of First Albany.

Market gurus also have faith in another powerful player—the individual investor, whose retirement needs are driving money into stocks and turning bad news into buying opportunities. Rao Chalasani of EVEREN Securities Inc. expects the flow of money into U.S. stocks to reach new highs, as falling interest rates and import prices give American consumers the equivalent of a tax cut and relaxed Japanese regulations allow investors to buy foreign mutual funds. The strong appetite for stocks is behind Deutsche Bank strategist Laszlo Birinyi Jr.'s forecast of a 36% rise in the Dow next year, making him the survey's biggest bull for the second straight year.

NET HIGHFLIERS. The investment guru perhaps most associated with the bull market, Goldman, Sachs & Co.'s Abby Joseph Cohen, expects the Dow to rise 11.6% to 9850 as foreign economies stabilize and corporate profits rise 7%. "The key to our bullish view on stocks has long been our bullish view on the U.S. economy," says Cohen, who sees

no end to "the best economic and corporate performance in a generation."

Riley of BankBoston expects the Dow to finish 1999 at 10,025. Nonetheless, he is concerned about valuations. "There is a bubble of sorts—no question about it," he says. The evidence: the rich price-earnings ratios of top performers, including Dell, Microsoft, and Cisco Systems. More worrisome, though, are the prices paid for profitless Internet stocks—a sector many think will crash in 1999.

Such concerns didn't stop analysts from anointing technology their favorite sector for 1999, however. As with second-choice health care, the rationale is that steady demand will boost earnings even as overall profit growth slows. Last year's top pick, financials, still has a following, thanks to continuing consolidation and a benign interest rate outlook. Contrarians are betting on battered energy stocks. "I don't see much downside risk," says Rob Brown of Ferris, Baker Watts Inc. He says Amerada Hess trades at a 34% discount to the \$75 per share value of its reserves.

How well did strategists do last year? As of Dec. 15, the cutoff date

for picking the winner, Allan Rones of JW Genesis was the big star, pegging the S&P within 3 percentage points and the Dow and NASDAQ almost to the button. Robert Dickey of Dabosworth Inc. trailed the pack, falling 31% short of the Dow's finish. Dickey won the BW forecasting ring in 1998. For next year, Rones remains bullish and Dickey bearish (see list, page 98).

As for picking individual stocks, Birinyi and Chalasani came out on top with America Online, up 309% through mid-December. Other winners include Lehman Brothers' Jeffrey M. Apple, who chose Microsoft, up 104%, and Riley, who picked Ascend Communications, up 133%. The worst: Brown, whose Patina Oil & Gas fell 68%; and CIBC Oppenheimer's former strategist E. Michael Metz, whose choice, Faroloid, fell 59%.

If the pros get it right, their triumph will probably reflect astute calls on interest rates and profits. But in all likelihood, their cautious outlook will prevail only if the individual investors agree that the time has come to restrain the exuberant bull.

By Anne Tergesen in New York

TOP GURU

The Clearest Crystal Ball of All

Several market strategists came close to pegging the Dow Jones industrial average's 1998 rise. A few were in the ballpark on the Standard & Poor's 500-stock index. But only one guru, Allan Rones of JW Genesis Securities, a brokerage in Boca Raton, Fla., correctly divined where all three major stock indexes would finish.

When BUSINESS WEEK stopped the clock on its market forecast survey for 1998 on Dec. 15, Rones had overshot the Dow by only 0.9% and the NASDAQ by a tiny 0.13%. He missed the S&P by 3 percentage points. Rones' closest rival, Eugenia Simpson of Kirkpatrick Pettis, was even more prescient on the Dow but trailed badly on the S&P.

RAGING BULL. The key to his crystal ball? Technology. "The technology industry keeps the U.S. on the leading edge," he says. That bullishness helped Rones come within a hair of the NASDAQ's 27% rise—a gain that caught all but Simpson by surprise. As for the Dow,



"LEADING EDGE": Rones favors high tech

Rones reasoned that progress would be restrained by slowing improvements in corporate profits and high valuations.

For 1999, Rones is even more ebullient, forecasting 30%-plus increases for all but the Dow, which he expects to rise 19%. The NASDAQ will still be powered by fast-growing earnings—a precious commodity as overall profit gains slow, he says. But the leadership mantle will pass to the S&P 500, whose less lofty values will attract bargain hunters. Cheapness will also help beleaguered small-company stocks, he says. Rones expects the Dow to continue to underperform, ending 1999 at 10,500. "The Dow Jones is way ahead of the fundamentals," he acknowl-

edges. Still, with interest rates low and foreign economies in disarray, money will also be flowing into Dow stocks.

What's Rones' favorite sector for 1999? Technology—of course.

By Anne Tergesen in New York

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WORST BLOOPERS & BEST CALLS

SO MUCH FOR THE EXPERTS...

Lots of high-priced seers were glaringly wrong in '98—so extra kudos go to the prescient

Who knew that 1998 would bring what it did? That the Dow Jones Industrial Average would take a stomach-churning ride from 9338 down to 7539, then back up to 9734, between July and November? That the economies of Asia, Russia, and Brazil would all crater? That Japan would sink deeper into the abyss and Malaysia would slam the door on foreign investors? That Bill Clinton's lying about sex would threaten the Presidency? It was easy to make a bad investment call and hellishly difficult to make the right one. And some folks were right for the wrong reasons—like those who predicted low interest rates but figured the economy would be on a stretcher. Herewith, *BUSINESS WEEK*'s picks for the worst bloopers and best calls of 1998:

HALL OF SHAME

BETTING ON CONVERGENCE. A year ago, Long-Term Capital Management, the elite investment firm based in Greenwich, Conn., was turning away investors eager for mouth-watering returns. In September, on the verge of ruin, the company had to be salvaged by a group of Wall Street firms.



YIKES! *The whizzes at Long Term Capital fizzled*

Former Salomon Brothers Inc. executive John W. Meriwether and the other finance whizzes who owned and ran LTCM had figured that over time, global interest rates had to converge—that is, the differences between them had to narrow—and they had leveraged the firm's assets to the hilt betting on convergence. What these refugees from Wall Street and academe didn't anticipate: a

marked and prolonged flight to quality among investors as Asian, Russian, and Latin markets tanked, which widened spreads and kept them wide. How to unwind such positions? Very carefully.

BETTING ON RUSSIA. Boris Yeltsin's government liberalized the economy but never really had regulatory or supervisory control. The reformers appointed by Yeltsin were no match for the oligarchs and the gangs, and by last summer, the fissures in the economy were deepening as taxes went unpaid and capital kept fleeing.

Some pretty smart money thought

the picture could improve, though Goldman, Sachs & Co., in a prospectus for a \$6.4 billion Russian Eurobond deal it was lead-managing, averred that "significant progress" had been made in Russia's economic reform program. Finance George Soros, who in 1997 had sunk new money into Russia through his eight investment funds, last summer argued that a modest devaluation and a fresh international assistance package could help the shaky economy. And in July, the International Monetary Fund approved yet another multimillion-dollar bailout to help the Russians the first \$4.8 billion installment. Everybody should have known better. In August, the Russian government said it was suspending debt repayments, and the economy went into free fall.

BETTING ON ASIAN MARKETS

There's no question that Asian economies looked wretched enough a year ago, and a number of observers figured they were ripe for a turnaround. In December, 1997, Robert M. Biggs, the global strategist for Morgan Stanley Dean Witter, boldly predicted that "BUSINESS WEEK survey to Tokyo and Hong Kong could have

substantial rallies in 1998" because most of the bad news had been discounted.

No dice. The bad news just kept coming as Japanese banks staggered under delinquent debts, Hong Kong battled speculators, and the markets got hammered. Instead of climbing to 18,000, as



CHILL WIND *Even Moscow maven Soros stumbled*

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Taking Things Further



WORST BLOOPERS & BEST CALLS

Biggs figured, the Nikkei 225 got as high as 17,264 in March, then plunged to a low of 12,879 in October. As of mid-December, it had recovered to 14,000. Meanwhile, the Hong Kong index hit a low of 6660 in August and as of mid-December traded around 10,000—well shy of the 14,000 mark Biggs had predicted.

STROKES OF GENIUS

TIMING MONETARY EASE. Credit Federal Reserve Board Chairman Alan Greenspan with getting it just right in the autumn when he cut short-term interest rates for a second time on Oct. 15 to calm markets. Coming as it did between meetings of the Fed's rate-setting body, the Federal Open Market Committee, the quarter-point move was a big surprise to the markets—and a welcome one.

Some people grouched that the first rate cut should have been a half-percentage point rather than a quarter-percentage point, and that the Fed could have sent the markets a message in one fell swoop. But splitting the action into two steps proved savvy. The ability to confound expectations should be part of every central banker's tool kit, and Greenspan has honed that skill to a fine art. The Fed's one-two punch, followed by a third cut on Nov. 17, demonstrated a strong commitment to ease and helped pave the way for other central banks to lower rates.

BETTING ON STOCKS. Abby Joseph Cohen got a well-deserved elevation to partner at Goldman, Sachs & Co. in October, but her real reward was being vindicated by the stock market's recent rebound. Throughout the late summer and early fall debacle in the market, she stuck to her guns, insisting that the Dow Jones industrial average would reach 9300 by yearend and increasing

BETTING AGAINST THE YEN. Julian Robertson Jr. had been having a great year—his \$20 billion hedge-fund group, Tiger Management Corp., was up 17%, after fees, through Sept. 30. Then a big bet on the dollar and against the yen pummeled his funds. According to publicly available figures for the offshore Jaguar Fund, which mirrors the

performance of Tiger's other funds, the yen trade helped push the fund's value down 18% in October and an additional 3% in November. Earlier in the year, this bet might have made sense. But lower rates weakened the dollar against other major currencies in October. As of Dec. 10, Robertson's funds were down 7.5% for the year.

BETTING ON CHEAPER OIL. Truth be told, almost nobody figured oil could go as low as \$11 a barrel. A year ago, the less knowledgeable a person the better. Sheikh Ahmed Zaki Yamani, former Saudi oil minister and chairman of the London-based Center for Global Energy Studies, predicted \$18 as a benchmark price for 1998, with \$16 as an extreme low. But consulting group Cambridge Energy Research Associates started the year saying that at the extreme, oil could crash to as little as \$8 a barrel in 1998. And Ann-Louise Hitle, director for world oil studies at CERA, predicted last February that oil prices could sink to \$12 a barrel if the world financial crisis worsened.

DOING NOTHING. Sometimes, inertia really is the best policy. Consider this: The odds are that you, like millions of other Americans, were worried by the summer's bad economic news. But not worried enough—or nimble enough—to do anything about it. So that 401(k) money kept sitting in the index fund, and when you looked at those poor third-quarter results, you thought: "Gee, maybe I ought to do something about this." But inertia got the better of you. Well, with hindsight, go ahead and call it wisdom. Because today, with the market back up, doing nothing turns out to have been one of the best calls of all.

By Karen Penmar in New York, with Patricia Kranz in Moscow, John Rossant in Rome, and Anne Terges and Gary Weiss in New York

her recommended stock allocation to 72% from 65% when the market was at its nadir in September.

Cohen likens the U.S. economy to a large, steady ship that has remained stable in rough seas and whose long-term economic prospects are very good. Taking the longer view, she says, "allows us to ignore some of the shorter-term noise in the marketplace." A stickler for thoroughgoing and reasoned analysis, she has shown herself to be the best of the bulls.

ON THE MONEY
Abby Joseph
Cohen



SMOKE SIGNALS
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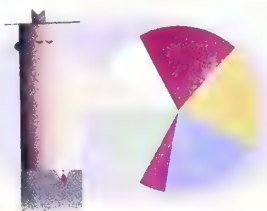
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Unflappable to the Core

What will it take to get U.S. investors really rattled? Something more, it seems, than what they saw in 1998. Even after weathering an abrupt stock market correction in the late summer and some nasty bumps since then, Americans find stocks compelling—and more of them than ever



before are joining the party. Investors think that the market in general is overvalued (Internet stocks, intriguingly, less so), and they expect greater volatility to come. Yet most are comfortable taking on risk to get a shot at the rewards: Two-thirds look for long-term returns of 10% a year or higher.

TO MARKET, TO MARKET

If you had to choose the one investment that you think would be the best to make right now, which would it be?

| | 1998 | 1997 | 1996 | 1989 |
|-------------------------------------|------|------|------|------|
| Real estate | 30% | 33% | 25% | 40% |
| Mutual funds | 18% | 21% | 24% | 8% |
| Common stock | 13% | 11% | 10% | 5% |
| Bank or saving & loan deposits .. | 11% | 10% | 8% | 8% |
| Money-market funds | 7% | 5% | 6% | 11% |
| Government bonds | 5% | 5% | 9% | 15% |
| Gold or other precious metals .. | 4% | 4% | 7% | 8% |
| Corporate bonds | 3% | 4% | 2% | 3% |
| I don't save or invest at all | 3% | 2% | 3% | NA |
| Not sure | 6% | 5% | 6% | 2% |

STEADY AS SHE GOES

Over the next year, do you think stocks will...

| | 1998 | 1997 | 1996 | 1989 |
|---------------------------|------|------|------|------|
| Go up | 37% | 38% | 39% | 36% |
| Stay about the same | 34% | 39% | 36% | 38% |
| Go down | 21% | 16% | 19% | 18% |
| Don't know/Not sure | 8% | 7% | 6% | 8% |

BRACE YOURSELF?

Over the next 12 months, how would you rate the chance of another big crash in the stock market?

| | 1998 | 1997 | 1996 | 1989 |
|---------------------------|------|------|------|------|
| Very likely | 14% | 13% | 12% | 12% |
| Somewhat likely | 41% | 43% | 35% | 28% |
| Not very likely | 29% | 31% | 35% | 40% |
| Not likely at all | 11% | 9% | 15% | 17% |
| Don't know/Not sure | 5% | 4% | 3% | 3% |

STOCKING UP

Have you bought common stocks or shares in a stock mutual fund within the past year, or not?

| | 1998 | 1997 | 1996 | 1989 |
|-----------------------|------|------|------|------|
| Have bought | 28% | 24% | 21% | 15% |
| Have not bought | 70% | 75% | 78% | 84% |
| Not sure | 2% | 1% | 1% | 1% |

REMAINING QUESTIONS ASKED ONLY OF STOCK INVESTORS

CONQUERING FEAR

Which statement best describes your attitude on investing?

| | |
|--|-----|
| I'm not willing to risk my retirement savings in the stock market. I invest mainly in highly predictable, risk-free assets such as Treasury bonds and money market funds | 18% |
| I'm willing to accept a certain amount of risk and give up | |

some predictability in order to achieve the higher returns that the stock market historically has produced. 57%
I view the stock market over the long term as reasonably predictable and not very risky, and so have invested most of my retirement assets there. 24%
I don't invest or save at all. 1%

DON'T BUDGE

How did you respond when stocks plunged this past summer?

| | 1998 | 1997* |
|---------------------------------|------|-------|
| Bought stock | 11% | 6% |
| Sold all stock | 1% | 0% |
| Sold some stock | 3% | 2% |
| Switched money into bonds | 3% | 1% |
| Didn't change holdings | 80% | 90% |
| Not sure | 2% | 1% |

FOREIGN PERILS

How would you describe the valuation of international stocks?

| | | | |
|------------------------|-----|-------------------------|-----|
| Very overvalued | 10% | Somewhat undervalued .. | 19% |
| Somewhat overvalued .. | 27% | Very undervalued | 4% |
| Fairly valued | 20% | Don't know | 20% |

THE LOFTY NET

How would you describe the valuation of Internet stocks?

| | | | |
|------------------------|-----|-------------------------|-----|
| Very overvalued | 24% | Somewhat undervalued .. | 7% |
| Somewhat overvalued .. | 24% | Very undervalued | 3% |
| Fairly valued | 26% | Don't know | 16% |

FUTURE IMPERFECT

Compared with this past year, do you believe that next year the stock market will be...

| | | | |
|----------------------------|-----|---------------------|-----|
| Less volatile | 16% | More volatile | 26% |
| About as volatile as | | Don't know | 2% |
| this year | 56% | | |

MAKE THE CALL

In general, how do you buy and sell stocks? (multiple responses allowed)

| | | | |
|-----------------------|-----|---------------------------|-----|
| By phone | 51% | Through my employer | 13% |
| On the Internet | 11% | Other | 7% |
| In person | 26% | Don't know | 1% |

EDITED BY KEITH H. HAMMONDS

This survey of 1,005 adults, including 343 stock investors, was conducted Dec. 9-13, 1998, for BUSINESS WEEK by Louis Harris & Associates Inc. For complete results of this poll, go to www.businessweek.com or America Online, Keyword: BW

*The 1997 question referred specifically to events in Asia.

You've taken precautions. Your data's protected. Absolutely. You sure?



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It's time for clarity.

'BORING IS IN'

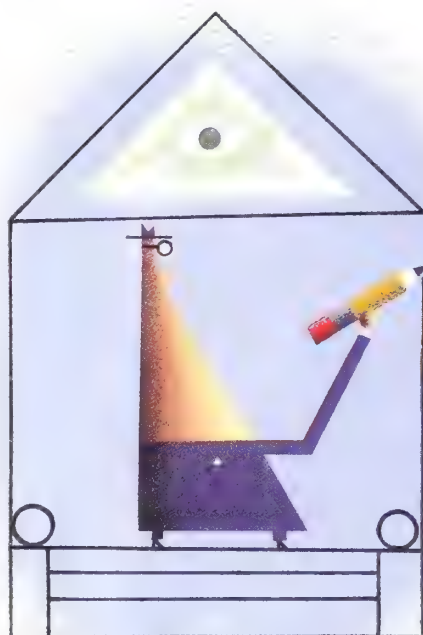
When investing in financial services, it's best to play it safe

Forget about global financial supermarkets. Don't bother with rocket-scientist dealers in derivatives. Avoid Master-of-the-University traders. In the topsy-turvy world of financial services, the rule of thumb for investors is to play it safe. "Boring is in," says Michael L. Mayo, a bank analyst at Credit Suisse First Boston. "You are not looking to hit a home run in this environment."

Caution is the watchword—because so much could go wrong. Global banks and brokerages are still grappling with turmoil in the markets—as demonstrated by J.P. Morgan & Co.'s announcement that it would not meet fourth-quarter earnings expectations. Domestic banks could see profits squeezed by lower interest rates. And difficulties in adapting computers to overcome the Year 2000 bug could erode earnings and disrupt merger plans.

LAGGING BEHIND. Some analysts simply suggest investing in something else. Bank stocks, after all, trailed the overall market in 1998 and could do so again. "I think they are going to be huge underperformers," says Charles W. Peabody, a bank analyst at Mitchell Securities. Still, some investors see safe-haven opportunities—usually in fee-earning businesses that benefit from the still relatively robust U.S. economy.

The trick is picking your spots: finding situations rather than sectors. At Davis Financial Fund, for example, the top pick is American Express Co., says Kenneth Charles Feinberg, co-manager of the fund's portfolio. Feinberg says the appeal of AmEx is that it benefits from the U.S. propensity to pay with plastic. But it makes money from membership fees and transaction charges rather than from risky lending on cards. "The key point is American Express has a



Salomon Smith Barney analyst Thomas O'Donnell says falling interest rates are boosting volumes at the GSEs, where upheaval in the market for mortgage-backed securities lets Fannie Mae and Freddie buy new mortgages at lower prices.

RUNNING FOR COVER. James Schmidt, John Hancock Financial Industries Fund manager, sees an opportunity in the wave of insurance companies going public through demutualizations. He likes Reinsurance Group of America Inc., reckoning that as more life insurers sell shares, they will reduce their risks by buying reinsurance. Brown Brothers Harriman & Co. analyst Raphael Soss suggests simply following the money by investing in U.S. Trust Corp., a private bank that manages funds for wealthy Americans.

Given the international uncertainties, there is less enthusiasm for banks and brokerages with global reach. But

some analysts say the banks are worth a look based on their price-earnings ratios—which are low compared with the market, if not historical standards. Chase Manhattan Corp., for example, has been trading at about 12 times earnings.

Investors who avoid foreign entanglements by buying domestic banks could run into another problem: low interest rates. The difficulties for banks is that their deposit rates are so low that they may not be able to push them down much more. The result, some analysts fear, is that banks' cost of funds could

remain steady while their returns on loans fall. Nonetheless, Mayo recommends First Union Corp. as a way to preserve your capital, at least. Not very exciting—but that's the point: it could be that kind of year.

By Gary Silverman in New York

PICKING YOUR SPOTS

| | PRICE | P-E | COMMENTS |
|---|--------|------|---|
| AMERICAN EXPRESS
(AXP) | 91½ | 17 | A safer card company that rakes in fees |
| FANNIE MAE
(FNM) | 67½ | 18.5 | Market turmoil is boosting mortgage lender's profits |
| FIRST UNION
(FTU) | 60 | 14 | High-tech, all-American, and ready to grow |
| U.S. TRUST
(USTC) | 64½ | 19 | A play on affluence—it manages money for the rich |
| REINSURANCE GROUP OF AMERICA (RGA) | 67½ | 20 | Demutualization could help this life reinsurer |
| CHASE MANHATTAN (CM) | 58 1/8 | 11.5 | Foreign exposure is a worry, but some smell a bargain |

DATA: BUSINESS WEEK

consistent earnings stream," Feinberg says.

Shelter from the storm also underlies the allure of Fannie Mae and Freddie Mac, the giant government-sponsored enterprises (GSEs) that buy mortgages and package some of them as securities.

BEST BET

★ **STEADY STREAM** American Express benefits from the U.S. propensity to pay with plastic. However, it makes money from membership fees and transaction charges rather than risky lending.



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TECH STOCKS: WILD, WOOLLY —AND PROFITABLE IN '99?

While volatile, they're likely to outrun the herd once again



Technology stocks should have another good year in 1999, but more than ever, it will pay to be choosy. Following the sector's remarkable bounceback, there are few true bargains left. After swooning in late summer and early fall, the Pacific Stock Exchange Tech Index climbed 44% from its Oct. 8 low through Dec. 14. For the year to date, it was up 38%, more than double the 18% gain in the Standard & Poor's 500-stock index.

For long-term players in particular, tech stocks are good to own because

the sector, although volatile, tends to outpace the rest of the economy. And the last few years have made tech seem like a no-brainer. Since tech stocks bottomed in June, 1994, the PSE Tech Index is up 270%, vs. 158% for the S&P 500.

The good news should continue in 1999. First Call Corp.'s consensus analyst estimate for growth in 1999 tech profits is 30%. Stock analysts' earnings estimates are notoriously optimistic and may well be too high, considering that the U.S. economy's growth is expected

to slow down in the coming year. But the analysts are probably right: Tech companies will do better than others. "Tech stocks have the strongest outlook of any industry next year," says one such bull, John W. Ballen, chief investment officer at MFS Investment Management in Boston.

Key parts of techland are firing on all cylinders. An explosion of electronic commerce is driving a powerful Internet and telecommunications boom. Products such as digital cameras and Dell Corp.'s Palm computers are flying off the shelves. And with the inevitable glut of personal computers now paying, prices are stabilizing. That is boosting profits of PC makers along with a broad swath of companies that rely on tech companies' success, such as disk-drive makers.

TWILIGHT ZONE. That's not to say, however, that all is well. Prices of a popular tech stocks, including IBM and Intel Corp., are at sky-high levels. A slowdown in the growth of e-commerce spending could hurt the tech sector. Many experts expect a shakeout in pure Net plays such as eBay, Yahoo and Amazon.com because their valuations are in the twilight zone. Mr. Lynch & Co. analyst Thomas P. Krueger says semiconductor stocks are overheated and warns investors to avoid all but a handful of niche chip stocks going into 1999.

While the Year 2000 bug should produce strong consulting revenues, says it Suisse First Boston software analyst Esther R. Schreiber thinks it will depress software sales. "The panic ton will go off" in the second half of 1999 when companies stop buying software and focus on making sure existing software works through the new millennium, she believes. As a result, Schreiber recommends only one stock—Microsoft Corp.—because she thinks it will sidestep the Y2K lull.

BEST BET

★ **LEADERSHIP THEME** Focus on companies that are likely to do well in a slowing economy or are the top players in their industry. These characteristics may be more important than a company's current earnings.

FOR THE RECORD

Paul T. Cook is co-manager of Munder NetNet fund, which invests in Internet stocks. Through Dec. 11, his fund was up 74%. His views:

ON HOW TO TELL WHETHER A TECH

STOCK IS A GOOD VALUE: There's no rule of thumb, but one place to look is intra-industry comparisons of price-to-earnings or price-to-sales ratios. Look for companies that sell at a discount to their peers and have strong balance sheets.

ON HIS FAVORITE SECTOR:

I like the telecommunications industry and competitive local exchange carriers. The pace of the Internet buildout will quicken next year, and they'll benefit. Cable modem

manufacturers are a good place to look. I like software security companies and online financial services companies, including E*Trade, Schwab, and Intuit.



PAUL COOK
Munder NetNet
Fund

ON WHAT TO AVOID: We like Internet companies such as Amazon.com and Yahoo!, but not as an investment right now. They're too expensive.

ON THE LIKELIHOOD OF A

CORRECTION: This industry is not for the squeamish. I expect a shakeout in some Internet stocks next year, specifically the portal companies.

"I expect a shakeout in some Internet stocks next year"

Making the right choices is critical, because a rising tide does not lift all ships. Through Nov. 30, the top tech mutual fund was up 70.5%, while investors lost money in the worst former, with a negative 17.4% return, according to Morningstar. One reason: This year, investors stepped many fast-growing tech companies just because they're small. But Ballen thinks that small-cap high stocks may gain ground on large ones in 1999, given the divergence in valuations of large and small stocks is among the largest in history.

The pros are focused on companies that likely to do well in

the growing economy or have a leadership role in a particular market. "The trick is to find companies that will succeed in their niche and that trade at reasonable valuations," says Paul Saperstone, technology analyst at State Street Research Investment Services in Boston. His top choice is Cadence Design Systems Inc., which helps industrial companies adapt chip technology to their products. Saperstone says Cadence's profits will grow about 20% annually over the next few years. At a recent price-earnings multiple of about 18 times estimated 1999 earnings, it's a steal, he says.

BUYING P-E. Higher valuations aren't scaring away all investors, especially if the company is perceived as a market leader. One expensive stock many like is America Online Inc. At a mid-September price of \$89 a share, AOL was selling at a dizzying 159 times expected earnings for the year ending in June, 1999. Paul Cook, co-manager of the Birmingham (Ala.)-based Munder NetNet fund, says the price is so high that the body in their right mind would buy this

stock unless they believed in the story." And he does believe it. "They have a real opportunity to become a staple of the Internet, if they aren't already," he says.

A similar leadership theme is used to justify investments in two expensive big-cap names by the co-managers of Dreyfus' Technology Growth fund. Mark Herskovitz and Richard D. Wallman like Cisco Systems Inc. and Lucent Technologies Inc. because they're the top players in their industries. Cisco is so dominant in networking that "it's one of three or four tech stocks to buy and hold for a long time and ig-

making for a p-e multiple of about 30.

TAKEOVER CANDIDATE. Ballen's favorites include top names in software and networking. He likes Oracle, Computer Associates International, Cisco, and Ascend Communications—long rumored to be a candidate for takeover by Lucent. "The world is going toward standardization, and these companies are all leaders" worth buying even at current valuations, he says.

All these tech companies trade at high p-e multiples compared with the broader market. But if you're looking for an easy way to tell if a tech stock is overvalued, good luck. Traditional measures such as price-to-earnings and price-to-sales ratios are sometimes taking a back seat to other concerns, such as a company's overall industry status. That means high prices and huge price swings will continue to be the norm. Still, if you want a good shot at outperforming the broader market—and are blessed with an iron stomach—high tech remains the place to be in 1999.

*By Geoffrey Smith
in Boston*

TOP TECH PICKS

| COMPANY | PRICE | P/E* | COMMENT |
|-------------------------------------|---------|------|--|
| AOL (AOL) | 89 | 159 | Internet leader will grow stronger with Netscape |
| MICROSOFT (MSFT) | 127 3/4 | 55 | The strong will get stronger, barring a federal breakup |
| LUCENT TECHNOLOGIES (LU) | 93 3/4 | 45 | Major beneficiary of Internet bandwidth buildout should weather economic slowdown |
| ADVANCED MICRO DEVICES (AMD) | 28 1/2 | 30 | Growth of low-cost PC market will accelerate earnings |
| CISCO SYSTEMS (CSCO) | 80 1/2 | 55 | Networking leader will continue to pummel competition |
| MCI-WORLDCOM (WCOM) | 62 1/2 | 32 | Ability to deliver voice and data over the Internet makes it a powerful competitor |

* 1999 earnings

DATA: ZACKS INVESTMENT RESEARCH

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THE BEST OFFENSE...

Some stocks don't depend on a strong economy—and may even gain in a downturn

It's mid-1999, and the market tanks. Are you ready? If you're seeking stocks to weather any storm, don't be surprised if your choices are painfully limited. Equities at bargain prices are about as easy to find as liquidity in Russia.

It wasn't long ago that utilities were obvious choices: They were cheap and provided a steady flow of cash dividends. But deregulation has taken those boring utilities and given them sex appeal. They are no longer cheap.

So where should one look? The answer is in stocks that make the best of a bad situation. These are what the pros call safe haven or defensive stocks—companies whose success is not dependent on underlying economic conditions. Sean N. McDaniel and Cappy R. McGarr, partners at McGarr Capital Management, a hedge fund based in Dallas, look for stocks that will outperform the market even in a market downturn. Typical defensive candidates are products such as food, razors, or soft drinks with strong brand names. "You want to find things people will need if the world falls apart tomorrow," McGarr says.

KILLER WEED KILLER. Two of the firm's top defensive choices are Monsanto Co. and Playtex Products Inc. Feminine care products, which make up 30% of Playtex' overall revenues, are in demand no matter what the state of the economy. The company's other divisions, infant care and

suncare, are also stable growers. And with Playtex in a buying mood, McDaniel expects earnings to increase 25% for 1999.

As for Monsanto, its two biggest businesses are drugs and agricultural products. "In a recession, I don't know

if people will want to buy Pentix chips, but I figure people will still need medicine and need to eat," says McDaniel.

Monsanto's agricultural products include strains of seeds to improve crop yields, as well as the world's leading weed killer, RoundUp. Products like that are a necessity for more efficient farming, which becomes especially important during times of weak commodity prices, says McGarr. On the pharmaceutical side, Monsanto's newest drug is called Celebrex, which just received Federal Drug Administration approval for treating arthritic pain. "The pharmaceutical side of Monsanto has the best cash flow and earning growth potential of any drug company," says McGarr, who expects the stock to reach its next year.

SAVING GRACE. Drug stocks, in fact, are traditional defensive plays. Bear, Stearns & Co. Senior Managing Director Robert S. Reitzes, a co-manager of the company's hedge fund New Castle Partners, says his best defensive pick is Genentech Inc., a biotech company with a novel twist. The \$2 billion market cap company offers excellent drugs, according to Reitzes, including Herceptin, a late-stage breast cancer drug that prolongs a patient's life. The drug just recently received approval.

But the main reason Reitzes loves this stock as a defensive play is that Roche Holding, which currently owns over half of Genentech's shares, has the right to buy the remainder of



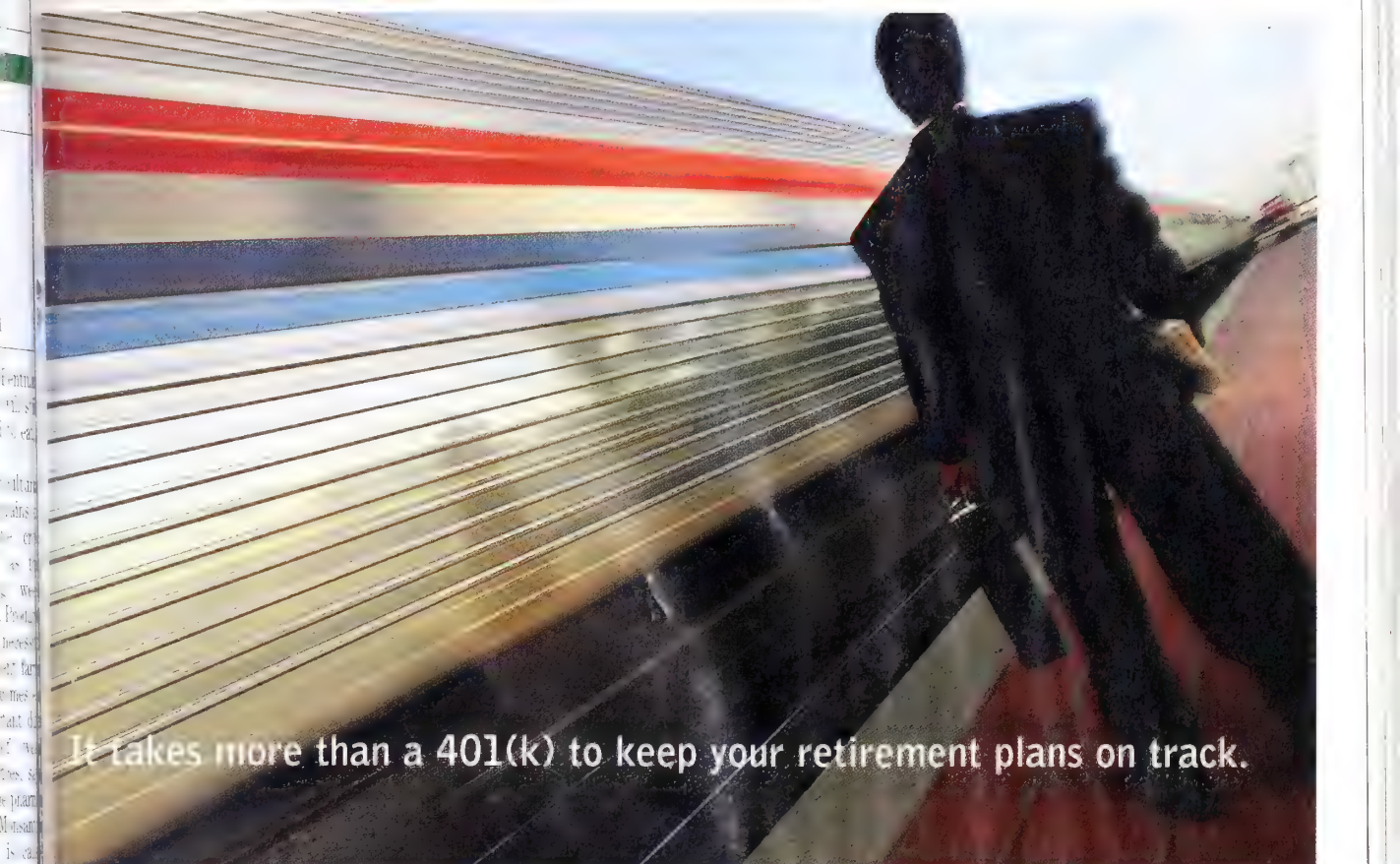
SAFE HAVENS FOR THE SAVVY

| | PRICE | HIGH | LOW | P/E |
|--------------------------------------|--------|--------|--------|--------|
| MONSANTO (MTC) | 41 1/4 | 63 1/4 | 33 3/4 | 44 |
| PLAYTEX (PYX) | 15 1/4 | 17 1/4 | 9 1/4 | 27 |
| GENENTECH (GNE) | 70 1/4 | 74 1/4 | 58 | 54 |
| PLAINS ALL AMERICAN (PAA) | 19 1/4 | 20 1/4 | 19 1/4 | 12 |
| IMAX (IMAXF) | 28 1/4 | 29 1/4 | 17 | 32 |
| INTERNATIONAL SPEEDWAY (ISCA) | 34 1/4 | 37 1/4 | 23 | 36 1/4 |

DATA: BUSINESS WEEK

BEST BET

★ HOT STUFF Food stocks are likely to beat the market during a slowdown—and Mexican food chains are especially good bets. Says one analyst: "Salsa and hot sauce are replacing ketchup as the condiment of choice



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G-9249A (8/98)

SAFE HAVENS

shares on June 30, 1999, at 82½. The stock currently trades at \$70 a share. If Roche declines to go through with the purchase, there's a saving grace to the investor: Should Genentech fall to 60, Roche is obligated to buy the remainder of the outstanding shares, giving modest downside risk to the owners of this stock, says Reitzes.

Bart Blout, a portfolio manager with Sawtooth Capital management, a Santa Monica (Calif.) hedge fund, says he's always on the lookout for defensive stocks because as a small-cap money manager who takes big positions, "Once I get in a room with fire, there's no exits."

While McGarr Capital looks at food from a wholesale level, Blout likes the retail level. Blout is a big fan of the fast-food chain Taco Cabana. The average check is only \$5.60. Cash flow from operations for 1999 should produce about \$1.70 per share in a \$7 stock. "A company that can generate its own internal cash is the definition of a defensive company," says Blout. And the chain has the highest unit volume of any quick-service restaurant in the U.S., including McDonald's. Taco Cabana is preparing to roll out its franchise nationwide.

PEZ POTENTIAL. Blout also believes that Mexican cuisine will become increasingly popular. "Salsa and hot sauce are replacing ketchup as the condiment of choice," says Blout. "As the cultures of the world come together, modern quick service and spicy food will be the choice of preference. I see McDonald's burgers as old-fashioned food."

Another safe harbor pick is The Topps Company Inc., an old-line baseball-trading-card company with a market cap of \$200 million. Says Blout: "This is an industry that went to hell in a handbasket. There's too many entrants, too much duplication." But with new strategies, the company has repositioned into the candy business, with "tons of new products," Blout says.

Bazooka bubblegum is one of the

products the company is known for. But it is now launching lots of new candy as well. Blout says the company can generate cash in the neighborhood of 10% to 12% of sales. A couple of new candy products can generate a lot of money," he says.

Blout is a big fan of the company's candy diamond ring. Like the real rock, it doesn't cost much to produce, but it

"Plus, there's big upside potential the stock, because the company can buy assets that will be sold off in oil mergers, like with Exxon Co. and Mobil Corp.," says Strome. The purchases can instantly accrete Plains All American because of nontaxpaying structure. The yield contributions are expected to grow about 10% a year. "Plus, this is

best-managed company on the face of earth," says Strome. **CARS AND FLICKS.**

Scovin, an entertainment analyst at Ladenberg, Thalmann & Co. in New York, is a big believer in stock car racing as a defensive play, because sports fans are loyal regardless of economic conditions. NASCAR sports racing has become one of the most popular television sports. Throw in barriers to entry meaning it's difficult to build new tracks near major metropolitan areas—and margins, and you have a compelling story. International Speedway Corp. and Speed Motorsports Inc. are two companies where Scovin expects 15% to 20% growth in revenues and earnings over the next few years.

If all else fails, there's always movies: 3-D movies, to be specific. IMAX Corp., a Canadian company, is the leader of movie screens and projectors. IMAX films. Imax, which developed the concept of 3-D movies on large screens more than two decades ago, has movie houses construct specialized theaters. Fueling the growth is a new era of IMAX movies that are character- and plot-driven.

"As more IMAX movies are developed with more popular content, we will create more of a buzz in the entertainment world," says Scovin.

IMAX has another plus: If the market really does tank next year, plenty of people may go to the movies to forget their battered portfolios. If that doesn't appease their sorrows, at least they'll be crying in the dark.

By Debra Sparks in New

FOR THE RECORD

Sean N. McDaniel & Cappy R. McGarr are partners at McGarr Capital Management, a Dallas hedge fund. The \$200 million fund specializes in taking large positions in mid- to large-cap equity securities.

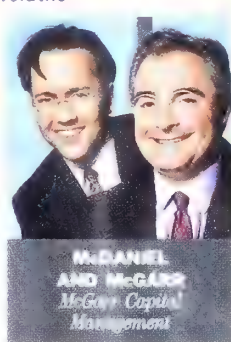
ON LOOKING FOR SAFE HAVEN STOCKS:

"You've got to examine a company's valuation relative to its growth prospects more closely in a volatile market environment. Even more important is managements' track record of delivering on its promises, because that's all you can count on when markets start to turn downward."

ON WHY CASH FLOW IS

IMPORTANT: "Cash flow is extremely important in bad times. If a company can generate enough cash to

finance its own growth internally, it will have a big advantage over competitors in any credit crunch."

**ON VALUATIONS:**

"Some defensive stocks, like drugs, typically sell at premiums to the market, due to their reliable earnings growth. You still can find cheap defensive stocks. But because defensive stocks typically outperform in volatile markets, it is important to get in early. Still, there are bargains out there if you look hard."

"Cash flow is extremely important in bad times"

commands fat prices. "If they keep bringing novelty products that capture kids' imagination, you get the candy company for a good price and the trading-card company for free," he says.

Mark Strome, president of Strome Susskind & Co., another Santa Monica hedge fund, has a defensive stock that even his grandmother owns: Plains All American Pipeline LP, a \$391 million market-cap oil-transportation company. Part of its appeal is its structure: It is a master limited partnership that acts like a real estate investment trust, which means it pays out 95% of its income in tax-deferrable dividends. Its current yield is 9½%—more like 12%, since the majority of the dividend is tax-deferred.

Plains All American, which transports oil from California to Oklahoma, has no competition on its routes and is not sensitive to the price of crude oil.



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First Union Banks on Success with SAS® Customer Relationship Management Solution

First Union Corporation faced a serious challenge. Nowhere in the corporate structure of the North Carolina-based financial services provider was there a total view of the customer. So there was no way company officials could tell—at a glance—what accounts customers held, what their transactions history was, what urgent and long-term needs they might have.

For First Union, a bank holding company with more than 16 million retail and corporate customers and assets of \$157 billion, this situation was a matter of intense and immediate concern.

In the increasingly competitive financial services industry, a loyal and growing customer base is the gold reserve upon which an institution's entire financial future depends. "We knew that companies that could not find ways to speak more directly to their customers' individual needs would be left behind," notes Geoff Ables, vice president of Targeted Marketing at First Union. "We didn't want First Union to be one of them."

From Product-Centric to Customer-Centric

To address this challenge, First Union took some bold steps into the technology-enabled 'next generation' of customer service—Customer Relationship Management (CRM).

Historically, banks have been product-centric organizations, focused on pushing a 'product of the day' to all customers—regardless of their individual needs—because some centralized management system declared the product most beneficial to the corporation. With a CRM orientation, banks become customer-centric institutions that deliver personalized financial products and services of most benefit to individual customers.

Lest one think CRM is just the latest management fad with no lasting bottom-line payoff, think again. Ables notes that the use of CRM techniques increased First Union's profitability by \$10 million—in a single month. Another CRM implementation, centered on the company's bank branches, boosted customer response to a recent product offering by 60 percent.

Results like these make it clear that CRM has tremendous potential to increase financial service providers' net earnings while enhancing customer satisfaction. Indeed, insists Ables, "Customer Relationship Management may be the most important contributor to maintaining loyal customer relationships—and a growing customer base—over the long term."

A Customer Service Solution

To implement its CRM-based strategy, launched in 1996 with the company's "Future Bank Initiative," First Union turned to the customer relationship management products offered by SAS Institute. A longtime global leader in developing industry strength decision support tools, SAS Institute was also one of the first companies to deliver customizable, off-the-shelf solutions for CRM, data warehousing, and data mining.

"First Union had been using SAS software for many years and had long been impressed with the products' functionality and dependability, particularly with their ability to provide the precise information needed to shape intelligent decisions," says Ables. When it came time to choose a CRM solution, explains, SAS software "just made sense."

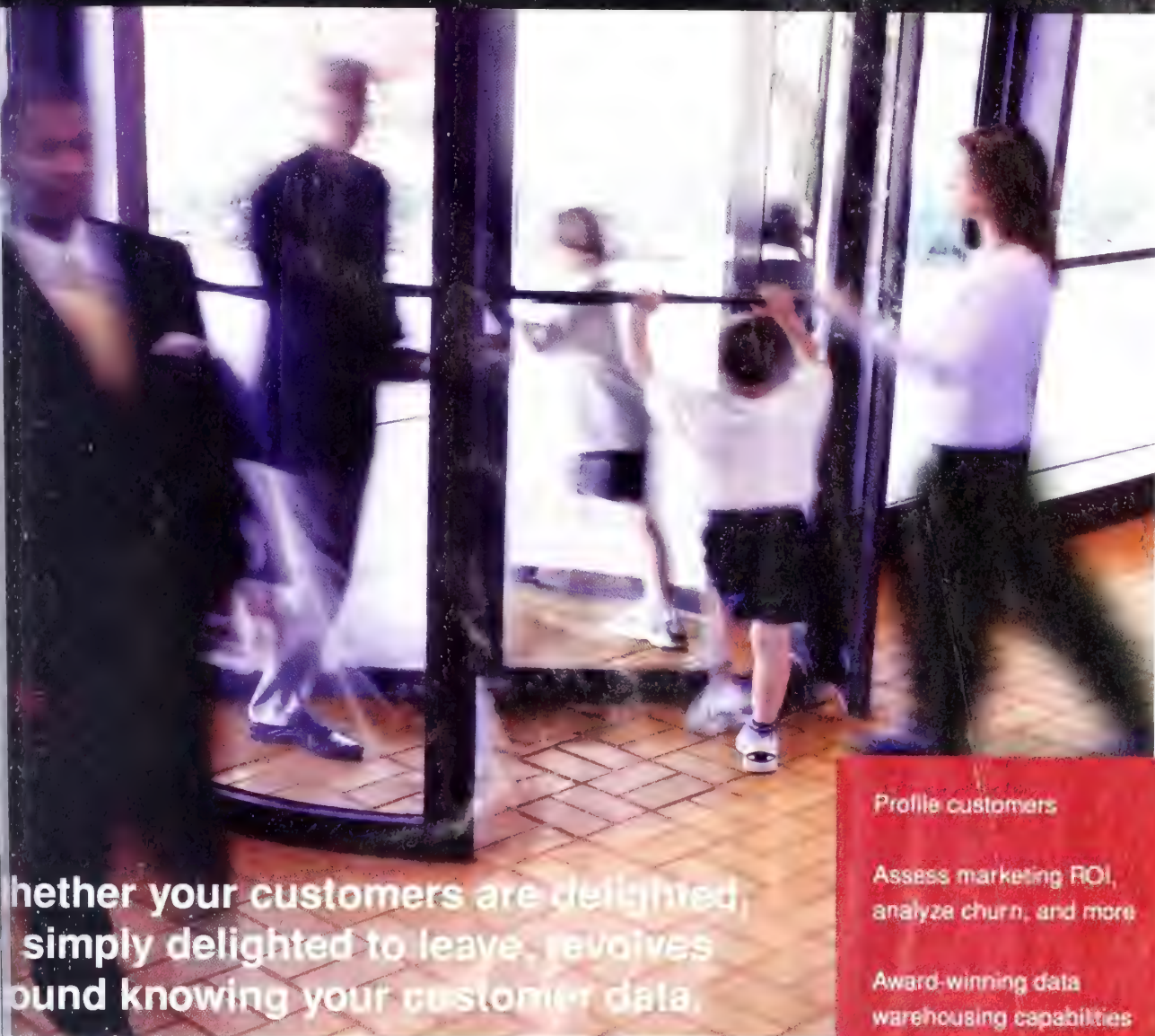
So far, First Union has deployed SAS CRM tools in multiple contexts—with uniformly positive results. The CRM products have allowed the company to do everything from sending highly targeted direct mail—based on customers' individual survey responses—to providing bank branches with comprehensive profiles on their customers. These profiles, drawn from centralized company data warehouses, represent the most promising areas for satisfying each customer's individual needs—and, concomitantly, increasing branch revenue.

"First Union has invested millions of dollars in building an esteemed financial services brand," says Ables. "By using CRM tools that allow us to speak to our customers in direct and relevant ways, we can fulfill the brand promise of delivering the very best customer service—and customer solutions—possible."



Geoff Ables, Vice President of Targeted Marketing, First Union Corporation

Customer Relationship Management



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DIGGING UNDER THE SURFACE

There's plenty of potential in companies too small for big investors to bother with

A 66-year-old name in home furnishings, Ethan Allen Interiors Inc. barely rang a bell on Wall Street a few years back. The retailer had a strong balance sheet, good earnings, and a sensible expansion plan, but its share price was stuck around \$10. Few analysts covered the stock, and none spied much opportunity. Then, last year, everything started to click.

Earnings soared, and by last March the stock topped 66 before retreating to around 40 recently. So why did Ethan Allen go unnoticed for so long? Investors routinely get blinded by glamour stocks. "Today, it's the romance of the Internet," says CEO M. Farooq Kathwari. Less exciting companies, meanwhile, may be well run and have close relationships with customers, "but they don't get recognized."

PROSPECTS. A sevenfold gain in any stock doesn't happen routinely. But for many investors, searching out the next Ethan Allen is what makes stock-picking intriguing. It's a way to beat the pros on a field tilted in their favor. Most megabuck portfolios ignore smaller-company stocks, since they can't buy enough of them to make a real performance difference. The upshot: less competition for the best small-company stocks at the right prices.

The risk is always that a stock ignored by Wall Street today will still be ignored tomorrow. Ultimately, though, strong earnings are hard to hide. With that in mind, we searched Morningstar Inc.'s Principia Pro database for U.S. companies with good returns on equity and strong balance sheets yet little or no Wall Street coverage. We looked only at companies trading at \$5 or more a share and with market values of \$50 million to \$500 million and returns on equity of at least 15% in each of the past five years. To capture possible takeovers, one way small-stock investors are rewarded, we mixed any company with half or more of its shares closely held.

We came out with 13 companies, from which we settled on six with the best long-term growth prospects plus one high-dividend payer (table,

page 122). Some, such as Electro Rent Corp., which rents PCs and testing equipment, may be undervalued. Others, including Techno Corp., a medical products supplier, may rarely go cheap. All, however, are well-established businesses with solid prospects.

HOT NICHES. Comarco Inc., for example, has at least three sources of future growth, unusual in a company with \$8 million in sales. Based in Yorba Linda, Calif., Comarco has branched out into wireless telecommunications from its roots as a provider of technical staff to the government and defense contractors. It has contracts in several states to install

upgrade roadside emergency call boxes,

niche it dominates.

The company recently began to sell

patented universal power

supply for laptop computers

and cell phones.

Perhaps the hottest niche

selling measurement tools to the

cellular industry.

They help the likes of Bell Atlantic

Corporation monitor and

quality and billing accuracy.

"We see next year being much

better than this year," says Chief

Executive Don Bailey, whose goal

is 25% compound

growth in sales and

earnings. One early Comarco investor was

Wanger Asset Management.

It has a 19% stake—a



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|--------------------------|---------|-------|-------|-------|
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| Blue Chip Growth | ***** | ***** | ***** | — |
| Capital Appreciation | **** | *** | **** | **** |
| Dividend Growth | ***** | ***** | ***** | — |
| Equity Income | **** | **** | ***** | **** |
| Equity Index 500 | ***** | ***** | ***** | — |
| Growth & Income | **** | **** | **** | *** |
| Growth Stock | **** | **** | ***** | **** |
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| New America Growth | **** | *** | *** | **** |
| Personal Strategy Growth | **** | **** | — | — |
| Value | ***** | ***** | — | — |

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prospectus carefully before investing. T. Rowe Price Investment Services, Inc., Distributor.

STRATEGIES FOR STOCKS

UNDISCOVERED GEMS

plans to stick with it, says portfolio manager Mark H. Yost.

Electro Rent hasn't fared as well lately. As PC prices have plummeted, the Van Nuys (Calif.) company has suffered lower rental rates and swifter depreciation on its inventory, which have snapped a long string of higher profits. In the fiscal year ended last May, Electro Rent earned \$1.33 a share. CEO Daniel Greenberg says he'll be happy this year to net even the 90¢ a share estimated by T. Rowe Price portfolio manager Preston G. Athey, a longtime Electro Rent holder. The bright side is that the PC price plunge seems to be stabilizing, and the company is making progress folding in the acquisition it made a year ago of its chief rival, a unit of GE Capital Corp. Even with lower earnings, Electro Rent proved its ability to spin out cash by generating enough to pay off \$80 million of its \$252 million in bank debt after the merger. That cut interest expenses to an annual rate of \$9.6 million from \$16.8 million. Those savings will go straight to the bottom line.

In Mankato, Minn., little Hickory Tech Corp. celebrated its centennial this year. But emboldened by telecom deregulation, this phone company is leaving its past behind. It has made some acquisitions and is expanding into cell phones and providing billing for other phone companies. It's also extending into adjacent communities, where it believes it can compete well against larger rivals such as U S West Inc. Over the past five years, Hickory Tech's revenues and profits have surged. Chief Financial Officer David A. Christensen says Hickory aims to double its \$88 million in sales over the next five years. Hickory's strategy has some risks—new investments may slow growth in profits and its 44¢ dividend. But, Christensen maintains,

"We are changing into a growth stock, and not just a dividend-paying entity."

NEW BAG. Liqui-Box Corp. makes plastic packages for milk and spring water. Now, with a new line known as a "form-fill-seal" bag, the Worthington (Ohio) company hopes to grab market share from can and bottle makers for soup, sauces, juices, and

sports drinks. The bag is sturdy enough to stand upright, says President C. William McBee, and can be formed, filled, and sealed aseptically by one machine. McBee says one risk for the company, with annual sales of just \$157 million, is being a small player amid huge rivals and customers such as Perrier Group of America. Another is thin trading in the shares—a concern with any little-known stock. We checked the market one day and found a gaping \$1.50 spread between what you would have paid for the stock one minute and how much you would have gotten for it the next.

Techne, by contrast, had a 25¢ trading gap, the narrowest of this group. It thrives in two biomedical niches: sales of controls and calibrators that help hematology labs perform blood tests and, more profitably, cytokines, which are protein molecules in growing demand by biotechnology researchers. In July, Techne moved to dominate the cytokine market by taking over its chief competitor, a unit of Genzyme Corp. With amortization charges from the deal, CEO Thomas E. Oland initially figured this year's earnings would sink by up to 12¢ a share. But orders are strong enough that he now sees net income in fiscal 1999, ending June 30, running flat. Beyond that, he expects strong growth.

A slower but steadier grower is Tompkins County Trustco Inc., which runs a 162-year-old bank in Ithaca,

N.Y. The steady payroll at the area's largest employer, Cornell University, has long kept the local economy, and the bank, on an even keel. For its future, the company is counting on a key distinction that has helped it expand its share of the area's deposits to more than 40% from about 25% seven years ago: "We are the only independent commercial bank in the area—and that's unlikely to change," says Chief Financial Officer Richard D. Farr. Loan growth through September grew 7%; earnings advanced nearly 12%. The bank is well capitalized with more than twice what's required, and steadily boosts its dividend by about 10% a year, a custom Farr doesn't see dying.

"VERY SAFE." A nice dividend is even more important to investors in United Mobile Homes Inc., an Eatontown (N.J.) real estate investment trust. It recently yielded a relatively high 7.5%. Its mobile home parks are older and of relatively low quality, according to William "Skip" Aylesworth, manager of First Realty Growth Fund, a sometime UMH investor. Still, Aylesworth thinks Chairman Eugene W. Landy and his son Samuel, who is president, know the business thoroughly and do a good job at the low end of the market. "This is very safe, stable income stream," Aylesworth adds.

Sam Landy sees 1999 revenue growing by 7%, with funds from operations and the dividend climbing about 10%, as the company follows its five-

year plan to go from 5,600 to 7,500 sites. Landy estimates the shares recently traded at just 60% of the company's asset value. That's cheap by any one's book—as are many other underappreciated gems. Blue-chip stocks may be sky-high, but there's no dearth of businesses that are solid, growing, and potentially rewarding anyone willing to pay attention.

By Robert Bark

ROOM TO RUN

Why do some stocks go unnoticed for so long? "It's the romance of the Internet," says Ethan Allen CEO M. Farooq Kathwari. Well-run companies like his—and the seven highlighted here—aren't as sexy as Yahoo!, but they have lots of potential

SMALL WONDERS?

| COMPANY (SYMBOL) | PRICE* | 52-WEEK RANGE | EPS** | AVG. ROE*** |
|-------------------------------|--------|---------------|-------|-------------|
| COMARCO (CMRC) | 22 | 23½-16½ | 0.92 | 17.28 |
| ELECTRO RENT (ELRC) | 10½ | 28-9½ | 1.16 | 17.16 |
| HICKORY TECH (HTCO) | 12 | 15½-10½ | 0.99 | 19.88 |
| LIQUI-BOX (LIQB) | 5½ | 60-35½ | 3.41 | 18.38 |
| TECHNE (TECH) | 18½ | 20½-12 | 0.77 | 22.70 |
| TOMPKINS COUNTY TRUSTCO (TMP) | 33½ | 40½-27½ | 2.18 | 16.94 |
| UNITED MOBILE HOMES (UMH) | 9½ | 12½-9½ | 0.63 | 23.26 |

*Dec. 14

**Trailing 12 mos.

***1993-98

DATA: MORNINGSTAR INC., BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS

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where everything is perfect,
then we think we've already found it.



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ty that my father first had the idea
create Maker's Mark. Without the hustle
bustle of the city to distract him, he
mull over ideas until they were just
That's how he came up with such a
l way of making bourbon.

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if he used winter wheat instead of

rye, he could improve the taste of the
bourbon. It would take on soft and subtle
characteristics while remaining full flavored.
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wonderful ideas, I can't imagine living any-
where else. So while the township where our
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CONTINENTAL DIVIDE

Political pressures and low growth vie with expanded markets and merger mania

After two years of booming European stock markets, the going has suddenly gotten rougher. Investors got a sharp reminder about risk when stocks sank 30% last summer. The market has since recovered sharply, but most pros think that, with a slowdown looming, risks have greatly increased. "Confidence is going down," says Gary Dugan, European equity strategist at J.P. Morgan Securities Ltd. in London. "The gap between the economies

slowdown could depress European profit growth to near zero, compared with an estimated 8% to 10% in 1998.

There's also a rise in the "politics of economic nonsense," as James Lister-Cheese of London-based Independent Strategy calls it. Europe's center-left governments are howling for more jobs yet won't pursue policies, such as liberalizing labor rules or slashing taxes, that might create them. Dugan, one of Europe's more bearish analysts, expects this will result in a paltry 4% total return on stocks in 1999. But

rope, who showed remarkable resilience during the recent decline. Flows into European equity mutual funds tailed off in August, but net withdrawal were only about \$500 million. Inflow kicked up to \$2 billion in September.

Markets may benefit as well from Europe's merger boom. They roared back to life after the summer doldrums

with November's \$58.5 billion in deals, according to J.P.

Morgan. The euro will fuel the fire by ratcheting up competitive pressures. Expect more action in pharmaceutical and financial services after the

recent tie-ups between Britain's Zeneca and Sweden's Astra and Deutsche Bank's takeover of Banker Trust. Banking seems sure to consolidate further with Britain's Barclays Bank and Halifax, Spain's Argentaria, and Germany's Commerzbank and Dresdner as the subject of speculation. Industries under pricing pressure will also see more deals. Elf Aquitaine and Royal Dutch/Shell may look to bulk up in oil, and British chemical stalwart ICI may shed its acrylics unit and buy more specialty chemical makers.

THINK BIG. The euro will also change investment patterns enormously. European investors, who have traditionally concentrated on their national markets, are gradually diversifying into broader European portfolios. Just as it no longer matters much to U.S. investors whether a company is headquartered in California or Illinois, Europeans are starting to worry less whether they buy a Spanish or a German company. As a result, potentially huge flows could boost many Continental stocks. And blue chips could well be the big gainers. "You begin by investing in the biggest stocks in other countries," says Bernard Fauché, head of equities at CDC Asset Management in Paris.

Changes in benchmarking will bring other opportunities. Portfolio managers will increasingly be measured against

and the markets is widening."

So the launch of the euro on Jan. 1 won't occur in the balmy environment anticipated a year ago. Gross domestic product will grow a modest 1.7% in the 11-nation euro zone, says Dugan. And most economists expect Germany, Europe's economic engine, to lag behind its neighbors, while Britain, the major holdout against joining the single currency, will flirt with recession. A

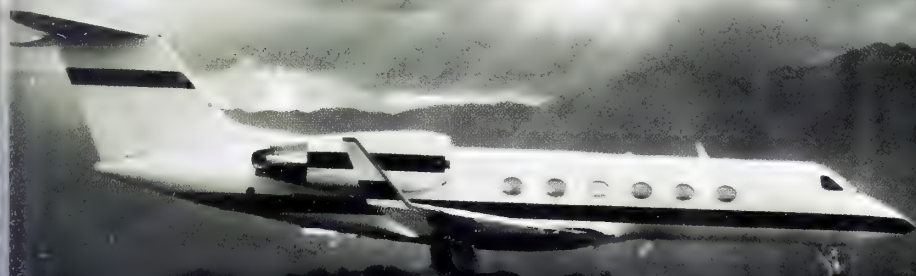
others are not so glum, arguing that slow growth will encourage the new European Central Bank to keep interest rates down, thus supporting stocks. Mark Howdle, strategist at Salomon Smith Barney, expects European equities to deliver 12% returns in 1999, and that could go even higher if easy money pumps up the markets.

Even more support could come from retail investors, a new breed in Eu-

BEST BET

★ **WHAT'S THE (NEXT) DEAL?** Expect even more merger action in pharmaceuticals and banking, two sectors in which the euro's approach is ratcheting up competitive pressures

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EUROPE

pewide indicators such as Morgan Stanley Capital International's MSCI Europe index or the Dow Jones Euro Stoxx 50 rather than Frankfurt's DAX or the CAC 40 in Paris. But investors going to beat managers into must-buy lists need to watch out for index traps. Stoxx 50, the euro zone's top 50 companies by market capitalization, is heavily weighted with bank, telecommunications, insurance, technology, and other issues. Stocks such as Allied Banks PLC or Portugal Telecom may get an extra lift as the only ones in their countries in Stoxx 50.

European stocks become one big bet, other important changes will come. Industry professionals are shift-

heaviest weighting of all, with picks including Germany's Munich Reinsurance Co. and Switzerland's Zurich Allied. Managements are transforming them from low-margin businesses to operations that can command premiums for service, he says.

BIG SQUEEZE. A few other industries can withstand lackluster economic trends and post growth. Bennett likes drugmakers such as Novartis, Roche, Pharmacia & Upjohn, and Glaxo Wellcome. He also likes technology plays such as French computer-systems consultant Cap Gemini and Logica PLC, a systems developer in Britain.

Deflationary pressures, however, will also produce dogs by squeezing margins

EUROPEAN STOCKS TO WATCH

| ANY | PRICE* | P-E RATIO** |
|---|----------|-------------|
| ARTIS Switzerland
pharmaceutical maker cutting costs | \$ 96*** | 26.5 |
| BOULANGER France
restructuring will help this food and beverage maker | 57*** | 25.7 |
| ELI LILLY Finland
leader in the fast-growing mobile-phone industry | 106*** | 28.7 |
| ZURICH ALLIED Switzerland
moving from insurance into asset management | 681 | 17.9 |
| MUNICH RE Germany
insurance industry consolidation should boost profits | 420 | 37.6 |
| CAP GEMINI France
player in rapidly expanding systems-consulting market | 150 | 35.8 |

ic. 14

**Estimated 1999 earnings

***American depositary receipt

DATA: BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS

from a country to a sector approach. Economic integration will cause stocks in different sectors to behave in a similar way, explains Martin Luley, head of equity portfolio management at Combank International Capital Management in Frankfurt. "You won't be able to add much value in overweighting underweighting countries," he says. Already, some strategists and portfolio managers are trying to pick winners and the best stocks in Europe. Food and beverages are a popular choice because consumer spending is expected to outpace business investment. Dugan likes French food giant Danone Groupe, a restructuring play exposed to emerging markets than Switzerland's Nestlé. He also recommends insurers Aegon of the Netherlands and Germany's Allianz, which he believes are undervalued. In fact, John Bennett, investment director for Euromoney at Global Asset Management in London, gives insurance stocks the

highest weighting in many industries. Bennett's GAM European hedge fund, for one, is shorting airlines and chemicals. He doesn't think much of telecommunications, either, which he pans as last year's fad. Other pros still think the potential of the Internet and mobile technology can't be ignored. Popular picks include Telecom Italia Mobile in Italy, Britain's Vodafone Group, and Finland's Nokia.

But even the bulls think 1999 will be challenging. This caution comforts some pros. Anthony J. Bolton, senior investment director at Fidelity Investments in London, thinks the summer's pummeling can be traced to too many investors buying into the euro in advance of the currency's launch. Then, when they realized that growth would be less than they had hoped, they bailed out. Will this year's caution guarantee a smoother ride? Don't bet on it.

By Stanley Reed in London, with Sharon Reier in Paris and Margaret E. Popper in Madrid

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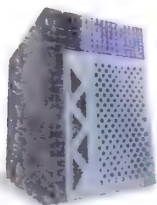


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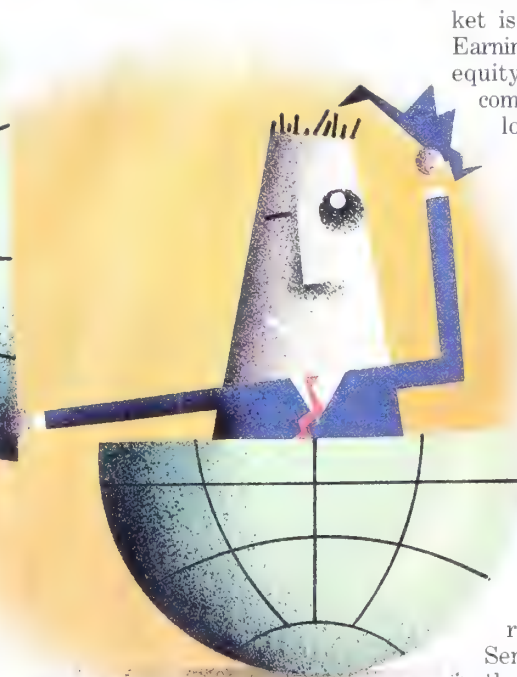
There are a few tantalizing trails in the minefield of emerging markets

After the drubbing Asian economies have taken, who would have thought that South Korea's composite index would double in dollar terms in 1998? Or that Thailand would be up 26% this year? Markets in Hong Kong, Kuala Lumpur, and Jakarta, though still down for the year, have rallied 20% to 30% from their lows. Following two years of great volatility in emerging markets, says Morgan Stanley Dean Witter Managing Director Robert J. Pelosky Jr., "that should be less so in 1999."

A global credit easing, launched by the Federal Reserve in the U.S., has buoyed stocks and stanchied the bloodletting that started in Asia and gave all emerging markets—and the global financial system—a mighty scare last summer. But behind the new calm, some ugly economic truths remain. They should keep investors on their toes.

RUNNING HOT. In East Asia, for example, most major economies except China and Taiwan are locked into low growth or recession, which is likely to extend into much of 1999. "Large parts of Corporate Asia are under the threat of bankruptcy," says ING Barings strategist Matthew Merritt in London. Besides, a price bust in commodities from oil to copper is pounding export earnings and government revenues in countries such as Russia, Mexico, Venezuela, and Indonesia. And if there's another government debt default in Russia, say, or the International Monetary Fund-led bailout of Brazil collapses, another rout could occur.

So if you're considering getting back into emerging markets, stick to stocks



ket is showing signs of overheating. Earnings are still dismal, and a flood of equity offerings from cash-strapped companies could drive prices sharply lower in the first half of 1999.

Merrill Lynch & Co.'s Seoul-based equity research head Kim Hun Soo, favors a handful of big players, including Pohang Iron & Steel Co., one of the world's most efficient producers, and Samsung Electronics Co., because its position as the world's biggest memory chip maker still enables it to generate profits.

WILD CARD. In Hong Kong, the key question is whether the rebound in real estate that began in November will hold. It's crucial because property stocks still represent about 22% of the Hang Seng Index's capitalization. Troubled is, the economy contracted at an annual 7% pace in the third quarter, and

commercial property values could tumble anew if companies renegotiate leases at lower rates. That's why the money is sticking with companies outside the real estate market, such as Johnson Electric Holdings Ltd., a maker of micromotors for appliances and power tools. Although its price-earnings ratio is 19 times expected 1999 earnings, the company has been a steady performer throughout the crisis, thanks to strong sales in Europe and the U.S.

Elsewhere, politics could be the wild card in 1999. India's Bharatiya Janata Party was trounced in state elections in December, weakening its coalition government. Besides, the country's budget deficit and rising inflation rates, corporate earnings under pressure. On average, Indian companies are selling for less than times earnings, and the market is

EMERGING PLAYS

| COMPANY | | PRICE* | P-E RATIO** |
|--|-----------|---------|-------------|
| POHANG IRON & STEEL | S. Korea | \$16*** | 7 |
| One of the world's most efficient producers | | | |
| JOHNSON ELECTRIC | Hong Kong | 22*** | 19 |
| Micromotor maker with strong European and U.S. sales | | | |
| TELESP | Brazil | 17*** | 2 |
| Phone operator is a defensive play in a recession | | | |
| BANGKOK BANK | Thailand | 2*** | NA |
| Lending margins are widening as interest rates come down | | | |

* Dec 14

** Estimated 1999 earnings

*** American depositary receipt

DATA: BUSINESS WEEK / BLOOMBERG FINANCIAL MARKETS

of companies boasting strong cash flow, a niche, or a product edge—and in countries acting to solve their deep structural problems. South Korea is a case in point. After the market plunged 60% in 13 months through June, global fund managers returned in droves because the Koreans looked serious about reform. But now the mar-

BEST BET

★ REFORM WATCH In emerging markets, look for companies with strong products and good cash flows—but make sure they're in countries that are acting to resolve their problems

is 35% below its average level of the past five years. So, India could be a buy if a new government reforms, while consumer stocks as Hindustan Lever could benefit from consolidation in this sector.

Economic reforms are also a major draw for investors in Latin America. Brazilian President Fernando Henrique Cardoso is locked in a pitched battle with Congress over an austerity plan that would enact if Brazil is to gain full access to a \$41.5 billion IMF credit line. If legislators don't play ball, investors will push for the exits, forcing the government either to devalue the real or to let it with depleted reserves. If it so succeeds, however, investment opportunities could abound. Tudor Asset Management Managing Director Paulo Borges already has both Citicorp, a big bank, and Comgás, a natural-gas distributor, in which the government plans to sell further next year. Telesp, a fixed-line company, is a good defensive bet if the economy is weak, says Moranley's Pelosky.

Investing in Brazil, of course, could spill over into other Latin markets including Mexico. That risk is mitigated by Mexico's big, liquid stocks such as Telefonos de México, a draw for investors wanting exposure in the region without getting locked in. Telmex sells at 12 times expected 1998 earnings, less than two-thirds of that for which Analysts also like consumer products, such as Coca-Cola Femsa, the soft-drink producer.

GAME. The biggest gamble of the year, though, is Russia. Its finances are in a shambles, its debt default in August and President Boris Yeltsin's fragile health have sent its stocks down 86%, in dollar terms, in 1998. "The probability of losing everything is high," admits William W. Wender, managing director of Heron Capital Management. But if you win, he insists, "in two or three years you'll have a 1,000% return." If the odds sound good, market watchers suggest oil company Surgutneftegaz, once a Wall Street favorite, it has become the wringer. It's now selling at a measly price-to-earnings ratio of 2.3, but it has little debt and owes no back taxes to the government—a rarity among its peers. If you're looking for calm to return to emerging markets in 1999, you're going to be disappointed: They are going to remain choppy. The trick is to find the right stocks in which to ride out the storm that could still produce gains for years.

Brian Bremner in Tokyo, with Michael Kranz in Moscow, Elisabeth in Mexico City, and bureau

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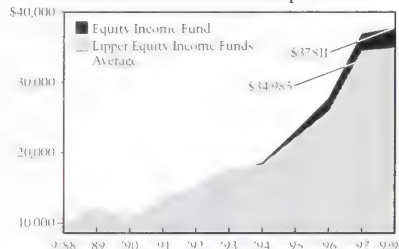
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STRATEGIES FOR STOCKS

JAPAN

IS IT MENDING?

Maybe—but the market is not for the squeamish

It's been an awful decade for Japan, one featuring a world-class market blowout, banking crisis, and severe recession. As a result, the smart money has long steered clear of Japanese stocks. But some intrepid strategists think the Nikkei stock average could break out of its funk and rally as much as 20% in 1999.

With big gains less likely in New York, London, or Frankfurt, the Nikkei bulls argue, this is not a party to miss. Indeed, after hitting a 12-year low, the Nikkei has already climbed 11%, to around 14,000. To be sure, the Nikkei has disappointed many times before—and current business sentiment remains dreadful. But this time, the optimists argue, is really different: A worried Japan is finally in full crisis mode.

The government recently nationalized the troubled Nippon Credit Bank, and some \$700 billion has now been set aside to salvage crippled lenders, cut taxes, and boost public spending to pull Japan out of a severe recession. Lehman Brothers analysts Robert Zielinski and Nozumu Kunishige argue that the big beneficiary of such efforts will be bank shares, which they maintain will jump in the first quarter as major lenders receive government cash infusions and write off bad debts.

ATTRACTING FOREIGN CASH. Many corporations, meanwhile, are casting gimlet eyes at their bloated costs and high debts. Even such one-time critics of the government as Nomura Research Institute Ltd. Chief Economist Richard Koo thinks the economy will improve dramatically in six months as banks recover and consumers start

spending. That, he says, will draw foreign cash into the Nikkei.

Having been burned before, however, even the bulls are investing with caution. Until he sees solid evidence that companies are getting rid of surplus capacity, says Jason James, equity strategist for HSBC Securities Japan Ltd., "we are still fairly defensive." Favorites on his list include Honda Motor Co., whose U.S. sales are soaring, and it picks up market share at home. Also likes Olympus Optical Co. with its dazzling lineup of digital cameras.

More daring investors are moving into the nation's biggest regional lender, Bank of Yokohama. It has

relatively low bad debt exposure and a strong retail banking base. It's trading with a forward price-earnings ratio of 10, rich by U.S. standards, but much compared with the 60 p-e for Japanese regional banks. Stock prices are also warming for housing plays. The government agrees with a Liberal Democratic Party proposal to

allow consumers to deduct more

interest, stocks such as upscale home builder Sekisui House Ltd. could be big. Indeed, it gained 50% in 1998.

Despite the rising optimism, however, remains a market only for those with particularly strong stomachs. The Nikkei is still off 67% from its 1989 peak. Four big rallies have collapsed after rallying the average above 20,000, even bearish prognosticators are beginning to wonder if they should change their tune now that corporations and the government finally seem to be taking serious about generating an economic recovery.

By Brian Bremner in

BEST BET

★ **A REGIONAL LENDER** Bank of Yokohama has low bad debt exposure and a strong retail base; its forward p-e looks



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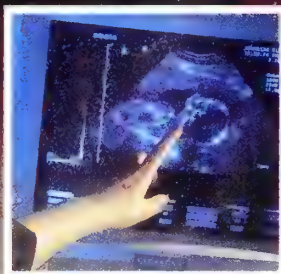
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OPTIONS

IT'S UP. IT'S DOWN. IT'S O.K.

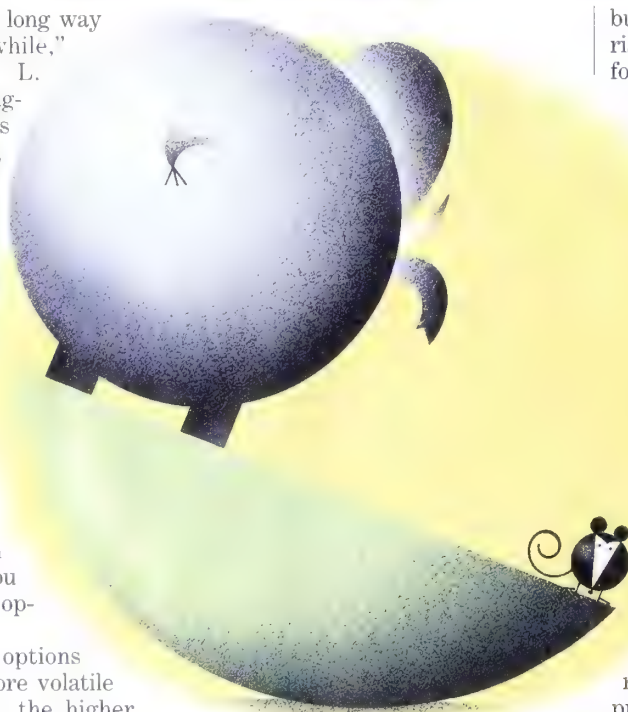
Buying and selling options can be a good way of making market volatility work for you

‘We came back a long way in a short while,” says Kevin L. Murphy, managing director of retail options at Salomon Smith Barney, referring to the rebound from the sharp summer sell-off. “It makes us cautious.” Murphy is not alone. Investors using options to protect themselves from market turbulence are pushing volumes at the major options exchanges to record levels. And considering the recent swings in the stock market, using options to reduce risk may be a good idea in 1999, provided you understand what makes option prices move.

The key to assessing options prices is volatility. The more volatile a stock or a stock index, the higher the price of an option to either buy that stock (a call) or to sell that stock (a put) some time in the future. Sure, stock charts give an idea of the range of historical price movements in a stock or stock index. But they are of limited use for divining future volatility. And determining future volatility is a big part of successful options investing. The best way of getting a fix on the size of future gyrations is to use options prices, which themselves reflect the market's volatility expectations.

The most widely followed measure of the volatility built into options prices is the market Volatility Index (VIX). That index tracks the prices of put and call options on the Standard & Poor's 100-stock index, which are traded at the Chicago Board Options Exchange. When the VIX closed at a peak of 49 on Oct. 8, the market was pricing options under the assumption that the S&P 100 index would move up or down about 49% in the next 12 months.

Those investors who had the courage to sell options at that level made the right bet, since volatility has fallen since then, and so have the prices of both put and call options, adjusting for



buy put options. These limit downside risk by locking in a guaranteed price for up to two years.

This kind of insurance policy doesn't come cheap. If you're holding Intel at 111%, the price of Dec. 14, an April put option to sell 100 shares of the stock at \$110 would cost \$900. That means the price would have been worth the investment only if Intel stock drops below \$101.

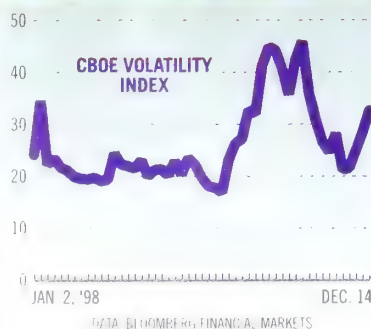
“COVERED CALLS.”

On the other hand, you believe the market is overestimating future volatility, you can take advantage of the high premiums by selling—or writing, as they say—call options against the shares you own.

These “covered calls,” as they are known, give the buyer the right to purchase your stock at a set price—called the strike price—up to an expiration date. This strategy has several advantages for investors. First, you collect premiums, instead of paying them out, as is the case when you buy a put option. Second, while your downside protection is limited only to the premiums you collect, you can still participate in share gains up to the strike price. “The best time to write calls is when stock positions are after a big run,” says Murphy.

Take Intel again. You own 100 shares. The stock has risen from 72% to 111% this year. If you think there still might be some upside but are willing to settle for a guaranteed but limited gain, sell calls. An April call option on Intel at a strike price of \$120 sells for 8% a share, or \$812.50 for 100 shares, excluding brokerage commissions averaging about \$35. With the stock at 111%, you would not be losing money until it fell below 103%—a 7.3% drop. If your stock stays where it is, and the contract expires worthless, you pocket the \$812.50. If Intel soars and your shares get called away, you still make \$843.75 of price gains, plus the \$812.50 premium. Not bad for a four-month commitment.

By Andrew Osterland in Chicago

VOLATILITY STAYS HIGH

price differences in the underlying stock. Currently, the VIX is heading back up, after falling to a low of 21 on Nov. 23 (chart), as fears about corporate earnings have increased.

How you hedge a stock portfolio depends on whether you think the options market is under- or overstating the future volatility of the stock market. If you think the market could head lower than options prices are implying, the simplest and safest hedge is to

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SWIMMING DOWNSTREAM

Emboldened short-sellers are betting that this is the year the bubbles will burst

The global sell-off of recent months brought tears to the eyes of investors everywhere. Short-sellers were also weeping—with joy. One noted short-seller, the Dallas-based Prudent Bear Fund, saw its bull-whipped performance reverse abruptly in the third quarter, climbing 22%—and sending it to the top of mutual-fund rankings for that period. The market's mid-December pullback similarly gave short-sellers a new lease on life. All this market action is making short-selling awfully tempting—particularly for those high-flying technology and Internet stocks. “I think they’re a pyramid scheme of the highest order and will all come crashing down sooner or later,” says Prudent Bear portfolio manager David W. Tice.

If that happens, shorts can win big. Short-sellers borrow stock in the hope that they can replace the borrowed shares with cheaper stock and pocket the difference. This is a risky strategy even in less volatile times, because shorts often are in danger of being “squeezed”—forced to replace their shares when the market climbs or for other reasons. Some stocks are difficult or even impossible to borrow and thus cannot be shorted at all.

However, short-sellers argue that crummy or grossly overvalued stocks eventually collapse. And the numbers seem to bear them out. Of the 10 stocks cited by short-sellers in BUSINESS WEEK's midyear appraisal of short-selling (BW—June 15), nine have

been crushed over the past few months. Shorts profited by correctly forecasting, for example, that sewing-machine maker Singer would be hurt by its exposure in less-developed countries. Sure enough, its already beaten-

down share price has been cut nearly in half since June.

Shorts such as Tice are betting that Internet stocks and other hot high-technology issues are also ready to take a fall. So far, such strategies have not quite paid off. Tice, for example, has bet against short Yahoo! Inc. and Amazon.com Inc. many times and often has had to swiftly cover his position when the market has moved against him. Indeed, his market bet at midyear did not prove propitious (page 11). Lately, however, he has profited with Intel Corp., a computer working company that went public at \$18 in June and has been trading recently in the \$20 to \$130 range. The stock has climbed as high as \$158, and Tice expects it to fall further from what he views as grossly unrealistic levels.

BIOTECH TARGETS.

The spectacular performance of Internet auction house eBay also has attracted shorts, who are betting against the stock because of its stratospheric valuation. Tice has shorted eBay but expects that, at a recent share price of 230 times sales, he eventually will take a short position. Another noted short player bet against eBay at about 170 times sales. It has seen it climb 20 points higher since then. But this eBay-basher is unfazed, arguing that Internet stocks such as eBay are “phenomenal speculation that will buckle if there is any economic weakness.”

Wagering against stocks on the



BEST BET

★ **TECH PLAYS** Although they have been wrong about cyberstocks before, many short-sellers consider them overvalued and ripe to take a fall, just waiting for the first hint of economic weakness

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SHORTS

sis of valuation is a time-honored strategy—and often a very bad one. It has fallen flat for stocks such as America Online Inc., which has been shrugging off attacks from short-sellers for years. A sounder practice is to short stocks of companies that are not just overvalued but also have some fundamental weakness—a product, for example, that works far less well than investors may expect. Some biotech stocks, such as Biotime Inc., have been targeted by shorts on that basis, with varying results.

Shorts also look for companies with questionable accounting. Shorts took aim at Computer Learning Centers a year ago for that reason. The company has vigorously denied short-seller allegations, but questions surrounding its accounting have sent its shares tumbling to nearly one-tenth of their prices of a year ago. Today, the leading accounting-practices target of short-sellers is Sylvan Learning Centers, a Baltimore-based educational services firm. Bear Stearns & Co. analyst David Nadel has publicly questioned the quality of Sylvan's earnings, such as its restatement of acquisition-related expenses. Sylvan management has emphatically stood by its accounting methodology. Bear Stearns for a while withdrew, and then reissued, a Nadel report on the company. Short-sellers share the analyst's misgivings—and then some. One short who requested anonymity has shorted Sylvan stock in the view that its shares will decline precipitously because of the kinds of concerns expressed by Nadel.

HOW COLLECTIBLE? Short-sellers also find opportunities in small “niche” companies with unique—but not always all that magnificent—product lines. One such stock that has begun to draw interest from short-sellers is Action Performance Cos., a Phoenix corporation that designs, markets, and distributes licensed motorsports collectibles. Shorts are questioning the growth prospects of

this merchandise, in the view that motorsports themselves are not growing wildly.

Another niche stock getting short-seller interest is AgriBioTech Inc., a Las Vegas-based grass-seed company. The company put itself up for sale in October but has yet to find any buyers. A recent Securities & Exchange Commission disclosure showed that cash flow from operations has not been sufficient to meet its debt-service obligations—without, that is, additional financing. Shorts are wagering on a continued, unstemmed cash outpour-

unit trusts, and with the “Diamond Dow Jones industrial-average unit trusts—both traded on the American Stock Exchange.

One way to wager against the technology sector, if you expect a downturn there, is to short semiconductor makers—notably Intel Corp. The Prudent Bear Fund's Tice is expecting slowdown in computer sales, which feels will cut into sales for Intel and other semiconductor manufacturers, such as Applied Materials and Novell Systems Inc.

Shorts are also wagering against

selected financial companies, betting they will take it to the chin if the economy falters. One that has begun to garner interest from shorts is AmeriCredit Corp., which securitizes car loans and originates mortgage loans. The company has doubled from its 52-week low of 6½ on Oct. 8. Tice is shorting companies vulnerable from overly permissive lending practices, among them private mortgage insurers such as PNC Group Inc. “In an economic downturn, you're going to see a substantial increase in defaults,” notes Tice. He also is short large-cap companies whose growth prospects are waning—on the technology side, notably United Technologies Corp.

SOME SHORT-SELLER FAVORITES

| COMPANY | STOCK PRICE* | YEAR-TO-DATE CHANGE |
|---|--------------|---------------------|
| 800 TRAVEL SYSTEMS (IFLY) | 6¼ | 18%** |
| A travel agency that is going nowhere, shorts believe | | |
| ACTION PERFORMANCE COS. (ACTN) | 33½ | -12 |
| A collectibles maker that will soon go out of style, shorts wager | | |
| AGRIBIOTECH (ABTX) | 10¼ | -37 |
| A grass-seed company that, say shorts, is likely to go to seed | | |
| AMAZON.COM (AMZN) | 222¼ | 638 |
| This Internet bookseller is grossly overvalued, according to shorts | | |
| AMERICREDIT (ACF) | 12¼ | -11 |
| If the economy falters, shorts believe, this stock will head down | | |
| CATERPILLAR (CAT) | 46¼ | -1 |
| This machinery maker is seeing its growth falter, shorts claim | | |
| EBAY (EBAY) | 188½ | 298** |
| This Internet auction house has burned short-sellers—so far | | |
| INKTOMI (INKT) | 125½ | 248** |
| Shorts are wagering against this networking company | | |
| INTEL (INTC) | 111¼ | 59 |
| If PC sales falter, as shorts believe, fewer Intels will be inside | | |
| SYLVAN LEARNING CENTERS (SLVN) | 25¼ | -4 |
| An analyst questioned its accounting, and shorts have piled on | | |

* As of Dec. 14

** Since IPO

DATA: BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS

ing, one that they feel will send the stock crashing. Shorts also are betting against such widely diverse small-cap companies as Iridium World Communications Inc., a Bermuda-based global mobile wireless company, and 800 Travel Systems Inc., a travel agency that specializes in low-price plane tickets. Shorts view both companies' prospects as wildly overstated by the market.

Wagering against small- and micro-cap stocks is just one way of making money on the short side. Shorts can also wager against the overall market by buying puts on the Standard & Poor's 500-stock index and on the Major Market Index. Another way to go short is with “Spiders,” the S&P 500

and Caterpillar Inc.

Despite the market's recent travails, short-selling remains an unpopular pastime on Wall Street, and few companies have not been rushing to organize short-selling mutual funds along the lines of Tice's. Indeed, even with his recent good performance, the bull market has sent his performance down 28% year to date. Short-only hedge funds, meanwhile, were down 8.5% through the end of November, according to figures compiled by Hennessey Group LLC. Discouraging figures. But shorts prove time and again that some stocks are so weak that not even the hottest market can save them.

By Gary Weiss in New York

Paradox:



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Random Access Memory, or RAM, is the most significant upgrade you can make to improve your ThinkPad's performance. Memory from Southland Micro Systems, specifically designed for the ThinkPad 770, is 100% tested and guaranteed for life.



*prices are shown. Guests add about 5%. Membership is free for a limited time. Join today and save!

THE PROS

MAY THE BEST STOCKPICKER WIN

Where would four top money managers invest \$100,000 in the coming year?

Each year, *BUSINESS WEEK* asks four money managers to hypothetically invest \$100,000 in 10 stocks. A year later, the one with the highest return wins.

1998 proved a tough year. All four stockpickers trailed the 17.6% rise, as of Dec. 14, in the Standard & Poor's 500-stock index—by a lot. In fact, only one earned a positive return. Winner Brian Posner runs Warburg Pincus Growth & Income Fund. His 10 stocks were up 3.8% thanks to two big winners, Gulfstream Aerospace Corp., up 71.5%, and Trigon Healthcare Inc., up 36%. But Polaroid and mortgage insurer PMI Group dragged him down. His fund was up 5.8% this year. Posner, a value investor, says his style was out of favor: "It was one of the worst years for value [investing] relative to growth [investing]."

Finishing second was David Herro, who manages Oakmark International Fund, down 9.3%. His picks were down 0.9% because of economic turmoil overseas. But Herro says his results would be positive if dividends were included. "I would have been up another 3.5% to 4%," he says. Herro's best bets were Danzas Holdings, a Swiss trucker and New Zealand agrochemical company Fernz Corp.

Christine M. Barter's specialty is small-cap growth stocks. This mutual-fund category dipped 5%. But Barter's 10 stocks were down 23.5%, despite her efforts to avoid tech stocks with Asian exposure and target companies that helped U.S. companies manage their technology. Three of the latter—Aris, ABR In-

formation Services, and DAVOX—plummeted an average of 55% each. At least her PBHG Emerging Growth Fund was down only 11.4%.

Bringing up the rear was David W. Tice, who runs the Prudent Bear Fund. He was down 45.2%. Of the eight stocks he sold short, only two declined. Tice thought tech stocks were poised for a fall, so he sold Yahoo! Inc. short. It soared 231%, while Intel Corp. was up 52%. Tice's only big win was shorting United Companies Financial, which makes second mortgages. It fell 73%. Meanwhile, his Prudent Bear Fund is down 26.1%. Tice still believes tech stocks are overvalued: "We think it is irrational exuberance at its finest."

Will this year's contestants do better?



BUYING CHEAP BUT READY FOR TAKEOFF

Filling Michael F. Price's shoes is tall order. Price sold the Mutual Shares fund group, based in Short Hills, N.J., to Franklin in 1996 and stepped down as portfolio manager this November. Five managers have replaced Price, including Larry Sondike, a co-portfolio manager of the Mutual Shares and Mutual Beacon Funds. Sondike, 41, is a 15-year Mutual Shares veteran who manages \$14.5 billion in the two funds. They have a solid long-term record, but 1998 was poor: Both funds were down less than 5%. Sondike says that because value investing overall did poorly in 1998.

Yet Price's legacy of value investing is going strong. Sondike picks companies that are unusually cheap, especially those that are poised to benefit from a spin-off, takeover, or stock buyback. "These stocks have cheap valuations, and may have catalysts to help realize that value," says Sondike. He has owned some of his picks for a few years.

A new pick is Payless ShoeSource Inc., the largest seller of discount shoes.

LARRY SONDIKE

Portfolio Co-Manager

Mutual Shares and Mutual Beacon Funds

| COMPANY SYMBOL+ | PRICE** |
|-----------------------------|---------|
| COOPER CAMERON (RON) | \$24 |
| INVESTOR (INVEA SS) | 42 |
| PAYLESS SHOESOURCE (PSS) | 43 1/2 |
| RJ REYNOLDS (RN) | 28 1/2 |
| RICHEMONT (CFR SW) | 1,413 |
| TELE CENTRO SU* (TCS) | 47 |
| TELEPHONE & DATA SYS. (TDS) | 44 1/2 |
| LEAR (LEA) | 36 1/2 |
| UNITED ASSET MAN (UAM) | 23 |
| US INDUSTRIES (USI) | 17 1/2 |

* ADR **As of Dec. 14 +Bloomberg symbol
DATA: BLOOMBERG FINANCIAL MARKETS

h an average pair going for just \$11. stock cratered from 75 to 43 because of strong performance by rivals, including Wal-Mart Stores Inc. and Target Stores Inc. But Sondike says Paycom's business is stable and cash-rich, with \$3 of cash per share on its balance sheet. He thinks the company will use the cash to carry out an already authorized buyback of one-third of its shares, which would boost the price.

Other potential buybacks on his top list are US Industries, a diversified home-products company, and United Capital Management Corp., an institutional fund manager. He is looking for Reynolds Tobacco Co. to spin off the tobacco to shareholders. Telephone Systems DS, a diversified telecommunications company, and Lear, the world's largest maker of car interiors, have stumbled, but both are restructuring in ways that Sondike believes will pay off. He even likes a stock from the out-of-favor oil-services sector, Cameron Corp., because it's a mining company that is down 70%.

Broadly, Sondike likes Investor, a dish holding company controlled by the Wallenberg family that owns blocks of Astra, L. M. Ericsson, and ABB Asea Brown Boveri. It trades at a 25% discount to its asset value, says Sondike.

Centro Su is one of three fixed-line telecommunications companies in Brazil that were acquired by Telebrás. And Richemont, which has offices in Zurich and Johannesburg, is a luxury-goods company that owns Cartier and most of cigarette maker Rothmans International.

COBETROTTERING FOR GROWTH

As manager of Federated International Small Company Fund, New York-based Tracy Stouffer has racked up so many frequent-flier miles, she'll never have to buy another plane ticket. Launched two years ago, the fund is one of the best performers in its category, up 19.3% year to date. Stouffer focuses on overseas growth companies with market capitalizations under \$1 billion that sell at a discount to their growth rates. Seven of her picks are in Europe, her current focus. She is avoiding Latin America and heading back into Asia.

Consolidation is one of Stouffer's themes. Germany's Kamps has 22,000 alone bakeries there and just 2% market share, but that's the highest of any baker. It is buying other German bakers, aiming for a 20% share. Natsteel, a Singapore company, is another consolidation play that buys shares of other tech companies.

Stouffer also likes European Internet



TRACY STOUFFER

*Portfolio Manager
Federated Int'l. Small Fund*

| COMPANY SYMBOL+ | PRICE* |
|-------------------------|---------|
| COFIR (CFR SM) | \$12.69 |
| BANPO (BNPU TB) | 1.19 |
| DO & CO. (DOC AV) | 45.44 |
| DON QUIJOTE (7532 JP) | 92.33 |
| ESAT TELECOM** (ESATY) | 35.25 |
| IDEAL (INTEK GA) | .10 |
| KAMPS (KAM GR) | 62.21 |
| KUDELSKI (KUD SW) | 2,824 |
| NATSTEEL ELEC (NELC SP) | 2.42 |
| TALENTUM (TTM1V FH) | 11.32 |

+Bloomberg symbol *As of Dec. 14 **ADR

DATA: PLUMBERS, FINANCIAL MARKETS

and telecom companies, in part because Net development in Europe lags behind the U.S. Some picks: Kudelski, a Swiss Net provider that is also in the smart-card and pay-TV businesses; and Ideal, a Greek telecom provider. In Ireland, which hopes to become Europe's Internet commerce hub, her pick is a company called Esat, a phone and Net-service provider.

A unique niche is another criterion for Stouffer. Don Quijote is a Japanese supersize convenience-store chain that caters to people who shop at night. Despite Japan's economic funk, the company is growing 50% a year. "No one is

doing the same format," says Stouffer, with the closest being 7-Eleven Stores in Japan. Another unusual company is Austria's Do & Co., which does high-end catering for airlines and Formula One races. It was recently hired to service New York's John F. Kennedy International Airport.

Rounding out her picks are Talentum, a Finnish publisher that is becoming a new-media company. She also likes Spain's Cofir, the owner of three- and four-star hotels; and Banpo Public Co., a depressed Thai coal-mining stock selling at a discount to book value. Stouffer thinks it will recover thanks to an ongoing recapitalization.

SNAPPING UP WALL STREET'S WHIPPING BOYS

Tech stocks are Roger B. McNamee's specialty. Once a T. Rowe Price Associates Inc. money manager, he runs a private, \$700 million "crossover" fund that buys stock in public companies and makes venture-capital investments. McNamee's first fund's annualized returns from Dec., 1991 to Oct., 1998 were up 30.6%, he says. Based in Menlo Park, Calif., he looks for strong companies that Wall Street has unfairly slammed.

While McNamee is a big believer in the Net, he avoids what he calls the "full-fledged mania" of Net IPOs. Instead, he likes established companies,

THE PROS



ROGER McNAMEE

General Partner
Integral Capital Partners

| COMPANY SYMBOL+ | PRICE* |
|--------------------------|----------|
| CAMBRIDGE TECH (CATP) | \$21 1/4 |
| CISCO (CSCO) | 80% |
| CONCORD COMM (CCRD) | 49% |
| DELL (DELL) | 64% |
| DOCUMENTUM (DCTM) | 39% |
| EMC (EMC) | 78 |
| GENESYS TELE LABS (GCTI) | 22% |
| MICROSOFT (MSFT) | 127 3/4 |
| PLATINUM SOFTWARE (PSQL) | 10% |
| PMC-SIERRA (PMCS) | 56 1/4 |

* Dec. 14 +Bloomberg symbol

DATA: BLOOMBERG FINANCIAL MARKETS

such as PMC-Sierra Inc. It's the leading vendor of chips used for building the Internet. Cisco Systems Inc. is a similar building-the-Net play. He likes hardware companies EMC Corp. and Dell Computer Corp. because he thinks they have better business models than their competitors.

McNamee's favorite category is enterprise software—programs that are used to run large corporations, from managing inventory to 800-number call centers. The group has gotten hammered because a few companies, notably Baan Co. and Peoplesoft Inc., underperformed. McNamee thinks good companies got swept up in their wake.

He especially likes Platinum Software Corp., a vendor of accounting software for Windows NT. McNamee thinks the markets' worries about Platinum's trouble integrating a recent acquisition are excessive. Other picks are Documentum, which sells high-end document-management systems; Concord Communications, which makes network-management software; and Genesys Telecomm Labs, which does call-center integration. He also sees opportunity at Microsoft Corp. The giant has three major product cycles beginning in 1999. And McNamee thinks the market will ultimately shrug off any antitrust problems. "Microsoft remains the best-positioned company in the software business," he says.

Still, since the typical technology stock is up 25% to 30% in the past six weeks, McNamee warns that trouble could come in early January. "We are vulnerable to a correction at the first sign of trouble on the earnings front."

EYES ON THE
WORLDLY AMERICANS

L. Roy Papp, 71, and his daughter-in-law Rose Papp, 44, have had a good run co-managing Papp America-Abroad Fund, a \$328 million fund based in Phoenix. It has a top BUSINESS WEEK rating and five stars from Morningstar, even though it has slowed this year, up

just 12% year to date. The fund's main target is U.S. companies with big operations abroad. They think globalization and technology will continue to drive U.S. growth and that global companies will outdovals. Their past home runs: Gillette Co. and Coca-Cola Co. "I believe globalization and technology are more important to our society than railroads and electricity were in their day," says Roy.

U.S. companies that are poised to benefit from overseas operations are State Street; Interpublic; Medtronic; medical supplier Medtronic American Power Conversion, which makes batteries and surge protectors for computers; and Molex, an electrical-connector maker. Most manager and financial custodian State Street gets about a third of its income abroad and has operations in 70 countries. Its overseas operations such as its 401(k) business, have been growing fast. "Instead of buying a foreign stock, we like State Street because it will benefit from more overseas investing," says Rose.

Another pick: global ad agency Interpublic Group, a holding company of McCann-Erickson Worldwide and Ogilvy & Mather. Papp America-Abroad Fund gets over 80% of revenues from outside the U.S. It is in 102 countries and is also an Interplay, with small investments in a number of Net ad agencies. The Papps are like Steiner Leisure, which has 80% of the business of running beauty parlors and spas on cruise ships.

By Leah Nathans Spivey
in New York



ROY AND ROSE PAPP

Co-Managers
Papp America-Abroad Fund

| COMPANY SYMBOL+ | PRICE* |
|----------------------------|----------|
| INTERPUBLIC GROUP (IPG) | \$65 1/4 |
| AM POWER CONVERSION (APCC) | 41 1/2 |
| G&K SERVICES (GKSRA) | 50 1/2 |
| INTEL (INTC) | 111 1/2 |
| MEDTRONIC (MDT) | 68 1/2 |
| MOLEX (MOLXA) | 30 1/2 |
| OFFICE DEPOT (ODP) | 29 1/2 |
| STATE STREET (STT) | 67 1/2 |
| STEINER LEISURE (STNRF) | 25 1/2 |
| T. ROWE PRICE (TROW) | 34 1/2 |

*As of Dec. 14 +Bloomberg symbol

DATA: BLOOMBERG FINANCIAL MARKETS

POSITION

ON WINDOWS NT SERVERS?

[illegible]

IN THE BASEMENT

OF THE 30 STORY
HEADQUARTERS
OF A FORTUNE 500
COMPANY.



THE IBM NETFINITY 7000 SERIES. HIGH PERFORMANCE SERVERS FOR WINDOWS NT.

e-business means a lot of things. It means moving business to the Web. It means improving relationships with customers, suppliers and employees — boosting communication and efficiency inside and outside an organization. It means looking at data in new ways.

e-business also means looking at PC networks in new ways. And it's not much of a surprise to hear that Windows NT[®] has become one of the most popular new operating systems in the corporate world.

In 1997, use of The Windows NT Server operating system grew by 139% worldwide, reaching a 34% share of all server operating systems (source: IDC).

What you may not know is that IBM is building Intel[®]-based servers with the power to run the major business applications — from companies like SAP, Baan, JD Edwards, Oracle, PeopleSoft and QAD — used in the largest of corporate networks.

But it isn't power and reliability alone that distinguish Netfinity servers from their would-be peers. It's that they come loaded with things like IBM Netfinity Management tools — a comprehensive set of standards-based software tools that make it easier to manage and grow your network. It's that you can add advanced tools like Web Server Accelerator (it's on the Net) to optimize performance by up to 70%. It's that we work with partners like Intel to bring new technologies to market — in servers designed to use them to their fullest.

The Netfinity 7000 M10 server, for example, is powered by the Intel Pentium[®] II Xeon[™] processor 400 MHz, providing it with some of the highest performance benchmarks in its class. Visit www.pc.ibm.com/us/techlink/srvperf for details.)

History, plain and simple, also separates Netfinity servers from all others. IBM has been building mission-critical systems for the corporate world for decades, and now we've applied that expertise to the world of Windows NT. Netfinity servers are the first to combine scalable parallel technology with a clustered system and hot-swap PCI implementation. Netfinity servers also offer scalability features you don't expect in a server running Windows NT — like the ability to hot-swap hard disk drives, adapters, power supplies, and more. Netfinity servers are also quick and easy to integrate into your existing IT infrastructure, whether it's powered by IBM (thank you) or not.

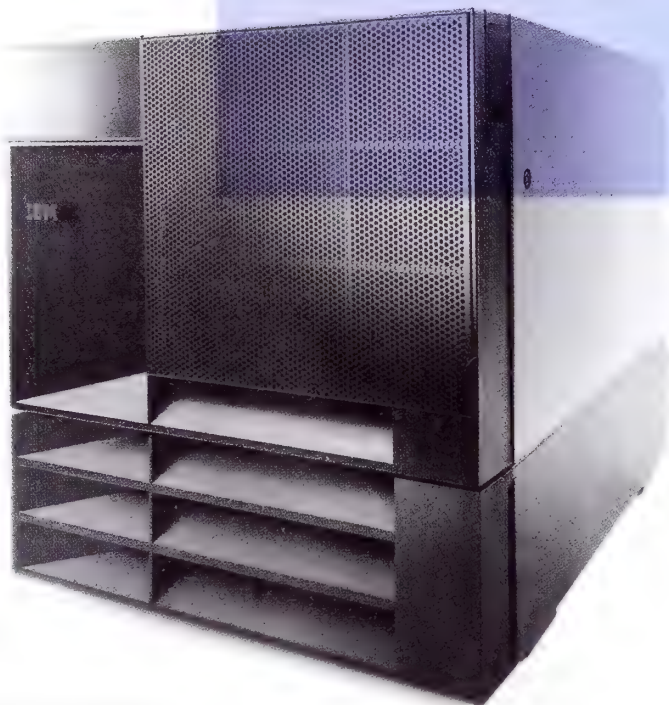
Netfinity servers from IBM aren't just tools for big business — they're tools for big e-business.

IBM NETFINITY 7000 M10

Up to 4-way Intel Pentium II Xeon processors (400 MHz) / Up to 8GB ECC interleaved memory / 100 MHz bus

IBM e-business tools

LOCKED IN
A WINDOWLESS
ROOM ON THE
8TH FLOOR
BETWEEN SALES
AND MARKETING.



THE IBM NETFINITY 5500 SERIES.
WITH INTEL PENTIUM II XEON PROCESSORS.

The real explosion of Windows NT servers has been at the departmental level — starting with desktop computers and then connecting those desktops into larger networks, enterprise servers and legacy systems.

The growth of intranets, Web commerce and sophisticated custom apps built with powerful cross-platform software like Lotus® Domino™ has fueled the demand for powerful, reliable servers that connect thousands of PC users inside an organization — from sales reps in the field armed with ThinkPads, to desktop users in customer service departments. Servers like the Netfinity 5500 Series.

A server is a repository of information, information that quickly becomes powerful business intelligence when fully exploited. This is e-business. Knowing more about customers, what they need and want. Mining growth out of details. Uncovering new markets (and margins) from within.

All these people connected via Windows NT servers also need access to the detailed information that resides on the more powerful systems that are the core components of a major enterprise (like, say, an IBM RS/6000 SP UNIX® server capable of processing millions

of transactions a second). In such a world, the ability to quickly and seamlessly integrate departmental Windows NT servers into your larger IT infrastructure is critical.

Netfinity servers, like the new Netfinity 5500 M10, help simplify this integration. Take, for example, IBM Netfinity Manager software. It ships with every IBM Netfinity server. It's platform agnostic. It lets you manage clients and servers from dozens of leading manufacturers. It also helps you tie your Windows NT network into enterprisewide management software such as Tivoli® Enterprise™, Microsoft® SMS™ and Intel LANDesk™.

This is what e-business is all about — not just building powerful servers for departmental use (and make no mistake, the Netfinity 5500 M10 can handle everything from huge e-mail networks to 24/7 Web commerce), but also providing tools to integrate and manage those servers as part of a much larger network. This helps you control costs and keep your network up and running.

This is the difference between a plain-Jane server and an e-business tool.

Up to 2-way Intel Pentium II Xeon processors (400 MHz) / Up to 2GB SDRAM ECC memory / 100 MHz bus

IBM NETFINITY 5500 M10

e-business tools

IN THE BACK OF A PET SHOP

BETWEEN A PALLET
OF ORGANIC DOG FOOD
AND A STACK OF
GUIDES TO BEING A
WEB ENTREPRENEUR.



THE IBM NETFINITY 3000 SERIES. AFFORDABLE SERVERS FOR WINDOWS NT.

But what if you're not a large business yet — or even a medium-sized business? What if the sales department doubles as the marketing department? What if corporate HQ is your desk? And your bedroom back at home seems more like a 24-hour branch office than a place to sleep?

Well, IBM is making servers for growing businesses with all their growth still to come. That means prices you can afford right now on a server that runs Windows NT: the basic Netfinity 3000 server (complete with an Intel Pentium II processor, speeding along at 300 MHz).

It's a very affordable server — but not a stripped one. Like all Netfinity servers, the Netfinity 3000 comes standard with Lotus Domino™ or Lotus Domino Intranet Starter Pack™, not to mention Netfinity Manager software.

This makes it easy and inexpensive to put your business on the Web, allowing millions of customers around the world to reach you. So you can grow from a very small business (say, for example, one pet store) to a very large one (say, the world leader in designer dog chow sales). As your business grows, you'll appreciate the virtues of the systems management software that makes it vastly

easier to keep your network up, running and generating more business. Nothing wrong with that.

Every Netfinity server includes a 3-year limited warranty and 90-day Start Up Support. Leasing plans, automatic 2-year product refreshes, customizable support, system installation and integration are available, if you desire.

Of course, the value, quality and reliability of the Netfinity 3000 server is such that a whole bunch of not-so-small businesses will choose them by the dozens for things like print spooling and file management. Not the most glamorous tasks, but the day-in, day-out, got-to-be-dependable side of e-business.

If you'd like to know more about the full range of IBM Netfinity servers, financing arrangements and server options — from supplemental storage to fiberoptic connections — bookmark www.ibm.com/pc.

You'll find we have the kind of e-business solutions you're looking for. Solutions for a small planet.™

IBM NETFINITY 3000

e-business tools

Intel® Pentium® II processor (up to 450 MHz) / Up to 384MB SDRAM ECC memory / 100 MHz bus

ALSO SEE NETFINITY SERVERS ON THE WEB AT WWW.IBM.COM/PC

| | | | | |
|----------------|--------------------|--------|---------|---------|
| Model | Processor | Memory | Storage | Price |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 10 GB | \$1,999 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 20 GB | \$2,499 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 40 GB | \$2,999 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 80 GB | \$3,499 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 160 GB | \$3,999 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 320 GB | \$4,499 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 640 GB | \$4,999 |
| Netfinity 3000 | Pentium II 300 MHz | 384 MB | 1280 GB | \$5,499 |

MERGERS

WHAT WAS JUST THE WARM-UP

Takeovers in 1999 should equal, if not surpass, last year's total of \$1 trillion in deals

Awesome. That was 1998, a year when a raft of megamergers and acquisitions helped push the stock market to uncharted high ground.

How does it look for 1999? The thing is that the value of takeovers will equal, if not surpass, 1998 total of \$1 trillion. "Just megamergers accounted for 30% of 1998's total volume"

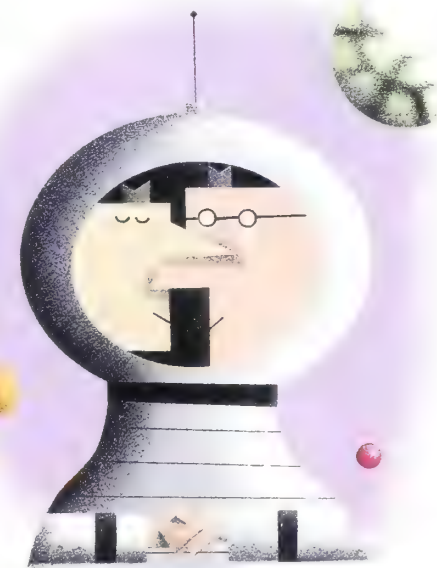
The Mergers & Acquisitions Advisor in New York. "Next year we will see another boom in megamergers as well as in minority deals," predicts Edward Kerschner, chief investment strategist at PaineWebber Group. "More and more companies 'have the need and the ability to do so,'" he argues. Corporations are now pressed to seek partners to generate fresh sales and find new ways to cut costs.

On Kerschner's list of takeover targets is Nextel Communications Inc., leading provider of specialized wire-communications services. If a for-profit outfit such as Mannesman, Siemens, or Vodafone decides to enter the U.S. market, it will want to do so in a big way—to reap economies of scale, says Kerschner. So an overseas buyer, if it adds, would be apt to pick a big player such as Nextel.

1 VISCOSITY. In Big Oil, still ruffled by the proposed Exxon-oil merger announced in November, the talk is that any merger is fair game. To veteran analyst Frederick P. Leuffer of Bear, Stearns Cos., Phillips Petroleum Co. seems "the most undervalued domestic major that we cover." He thinks Phillips' operations might be a good fit for Elf Aquitaine, the French giant.

Other good matches for Phillips, says Leuffer, could be Amoco Inc. and Chevron Corp. The latter, incidentally, is also rumored to be buyout bait.

In addition, Leuffer points out that ARCO is an attractive target. He says ARCO has the strongest position on the West Coast of any company, operates the two



largest oil fields in the U.S., and owns the best exploration acreage in Alaska. ARCO also has some excellent exploration opportunities in the Gulf of Mexico.

Hilton Hotels Corp., which has just spun off its slumping casino operations into a separate company called Park Entertainment Corp., is one of the com-

panies that market maven Mario Gabelli is betting on as a takeover target in 1999. Hilton's 260 hotels will be a valuable asset, he thinks, for a larger company in the business. At its current price of 19%, the stock is one of the best bargains among prominent hotel franchises, says Gabelli.

To Charles LaLoggia, editor of *LaLoggia's Special Situation Investor*, a newsletter in Potomac, Md., the big money to be made in takeovers will be on deals that involve small-capitalization companies. That's because of a "value gap" between the large and small caps, which have lagged behind the blue chips. LaLoggia thinks the sectors to watch are: supermarkets, security equipment, drugstores, water utilities, and pharmaceuticals.

SHOPPING LIST. Here are LaLoggia's picks: Smart & Final, which operates 213 warehouse-style grocery stores; Response USA, already 14.8% owned by Protection One, which has been acquiring small alarm companies in the past two years; and Copley Pharmaceutical, 51% owned by Germany's Hoechst, which had paid \$55 a share in 1993 for its Copley stake. Hoechst recently agreed to merge with France's Rhône Poulenc. LaLoggia thinks Hoechst will either buy all of Copley or sell its stake to another player.

Michael Ginsberg of JWGensis Financial Corp. is casting his eye on the office-supply business, which he thinks is entering the final wave of consolidation. Corporate Express Inc. is a likely target, says Ginsberg. The company has recently been struggling to improve its dismal performance. While its sales growth has been strong—surpassing \$3.5 billion—its stock has been weak because of disappointing earnings. "The company could be worth more to another player in the business," says Ginsberg. Superstores such as Office Depot Inc. or Staples Inc. are very likely, says Ginsberg, to rise to that enticing challenge.

By Gene G. Marcial
in New York

WHISPER STOCKS

| COMPANY | CURRENT PRICE* | BUYOUT PRICE** |
|------------------------------------|----------------|----------------|
| ARCO (ARC) | \$65 1/4 | \$82 |
| CHEVRON (CHV) | 85 1/4 | 115 |
| COPLEY PHARMACEUTICALS (CPLY) | 8 1/4 | 18 |
| CORPORATE EXPRESS (CEXP) | 5 1/4 | 11 |
| DONALDSON, LUFKIN & JENRETTE (DLJ) | 33 1/4 | 55 |
| HILTON HOTELS (HLT) | 19 1/4 | 30 |
| MELLON BANK (MEL) | 64 1/4 | 80 |
| NEXTEL (NXTL) | 22 1/4 | 45 |
| PAINWEBBER (PWJ) | 33 1/4 | 55 |
| PHILLIPS PETROLEUM (P) | 40 1/4 | 60 |
| RESPONSE USA (RSPN) | 3 1/4 | 7 |
| SMART & FINAL (SMF) | 9 1/4 | 18 |

*As of Dec. 14

**Projected

DATA: BUSINESS WEEK SURVEY OF ANALYSTS AND INVESTMENT MANAGERS



Imagine a world which gets progressively cleaner

Imagine a world where city planning actually improves the quality of people's lives.

Imagine a world where new forms of communications technology are more user friendly.

Vivendi has already imagined this world. What is more, we have begun to build it. Our water companies are continually

improving the quality of supplies to more than 80 million people around the world. Our waste management systems encourage recycling. Our power-generating stations lead the way in efficiency. Some even use waste as fuel.

Thanks to Vivendi companies, transportation systems across Europe are better planned and more cost-effective.

Every year, our construction companies manage over



and the world. Recent projects have included the Stade
Cairo's new rapid transit system and the Vasco da
Gama in Lisbon.

Vivendi has also become a major player in the field of com-
munications, providing easy access to mobile phone networks,
Internet and digital media.

Reading this, you might deduce that such wide-ranging
activities are commensurate with considerable financial growth.

And you'd be right. Vivendi is one of Europe's largest companies,
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All things considered, it seems that when
the customer comes first, success soon follows.

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www.vivendi.com

CAN ANYBODY OUT THERE BEAT THE S&P 500?

Only 10% of funds did it this year. Maybe small-cap funds will in '99

Until 1998, mutual-fund investors have had three years of both good news and bad news. The good news: Your funds' managers made you a double-digit return. The bad news: You could have earned even more with a Standard & Poor's 500-stock-index fund. With so many years of underperformance, surely portfolio managers would have learned a few tricks on how at least to equal returns on the S&P 500.

Yeah, right. About 90% of U.S. diversified equity funds failed to beat the S&P 500 in 1998, about the same as in 1997. But in 1997, when the S&P logged 33.7%, fund managers still earned a plump 24.1% total (including reinvestment of dividends and capital gains).

In 1998, the S&P's total return is 21.9% (through Dec. 11), but the average domestic equity fund could scrape together only 7%, according to Morningstar Inc., which supplies fund data to BUSINESS WEEK (table, page 156). That's the worst showing since 1994.

BIG-STOCK BIAS. International funds, on average, broke about even, though funds investing in emerging markets lost 28.76% of their net asset values in 1998 atop 1997's 5.3% decline. Even with knockout returns in specialty funds like technology, up 34.2%, and communications, up 30.25%, the all-equity fund average weighed in at just 5.04%. That's less than investors could have earned in the average municipal bond fund, 5.45% (table, page 156), or

even a money-market mutual fund.

Investors aren't abandoning funds but they're changing how they use them. For the first 10 months of the year, net inflows to equity and hybrid (equity and bond mixes) funds were \$151.5 billion, about \$56 billion, or below the comparable period in 1997. But during the 10 months, net flows to bond funds amounted to \$61.2 billion—and flows to money-market funds nearly tripled, hitting \$210 billion. Even after a severe midyear correction, the wave in eight years, must have shocked investors who had only known up-and-down prices for equity funds. But even seasoned sorts realized the virtue of diversifying away from equities.

Still, how could such highly educat

THE BEST RETURNS

of dividends and capital gains before taxes, Jan. 1 through Dec. 11, 1998

| | TOTAL RETURN* | | TOTAL RETURN* |
|---------------------------------------|---------------|---------------------------------------|---------------|
| PROFUNDS ULTRAOTC INV. | 141.27% | ORBITEX INFO-TECH & COMMUNICATIONS A | 45.60 |
| POTOMAC OTC PLUS | 85.76 | REYNOLDS OPPORTUNITY | 45.57 |
| GRAND PRIX | 80.71 | DRESDNER RCM GLOBAL TECHNOLOGY | 44.85 |
| MATTHEWS KOREA I | 78.85 | ALLIANCE TECHNOLOGY B | 44.23 |
| FIDELITY SELECT COMPUTERS | 78.39 | ASAF JANUS CAPITAL GROWTH B | 43.92 |
| DREYFUS TECHNOLOGY GROWTH | 76.66 | WEBS INDEX SPAIN | 43.75 |
| MUNDER NETNET A | 74.10 | NICHOLAS-APPLEGATE LARGE CAP GROWTH B | 42.97 |
| RYDEX OTC INV. | 71.33 | MONTGOMERY GLOBAL COMMUNICATIONS R | 42.96 |
| FIRSTHAND TECHNOLOGY LEADERS | 70.71 | INFORMATIONTECH 100 | 42.91 |
| NORTHERN TECHNOLOGY | 63.62 | WEBS INDEX BELGIUM | 42.48 |
| BERGER SELECT | 62.08 | WWW INTERNET | 41.90 |
| TRANSAMERICA PREMIER AGGR. GRTH. INV. | 61.50 | REYNOLDS BLUE CHIP GROWTH | 41.60 |
| PIMCO INNOVATION C | 60.72 | PRINCIPAL PRESERV. PSE TECH 100 INDEX | 41.42 |
| TRANSAMERICA PREMIER SMALL CO. INV. | 58.96 | FIDELITY SELECT ELECTRONICS | 41.12 |
| FIDELITY SELECT TECHNOLOGY | 58.57 | MANAGERS CAPITAL APPRECIATION | 40.33 |
| FLAG INVESTORS COMMUNICATIONS A | 56.44 | MSDW INFORMATION B | 40.11 |
| JANUS TWENTY | 54.99 | SMITH BARNEY TELECOM. INCOME | 40.07 |
| SCHRODER MICRO CAP INVESTORS | 54.69 | UNITED SCIENCE & TECHNOLOGY A | 39.64 |
| FIDELITY ADVISOR TECHNOLOGY T | 51.39 | JANUS MERCURY | 39.52 |
| AMERITOR SECURITY TRUST | 51.35 | JANUS OLYMPUS | 38.93 |
| PBHG LARGE CAP 20 PBHG | 48.10 | MARSICO FOCUS | 38.90 |
| MONTGOMERY GLOBAL LONG-SHORT A | 47.77 | SMITH BARNEY LARGE CAP GROWTH B | 38.41 |
| FIDELITY SELECT DEVELOPING COMM. | 47.66 | AMERITOR INVESTMENT | 38.20 |
| EXCELSIOR LARGE CAP GROWTH | 47.61 | WM GROWTH A | 37.98 |
| IDEX GROWTH A | 47.42 | NOAH | 37.87 |

well-paid managers have perched so poorly? In some cases, not entirely their fault. As been the case for the past several years, large-company funds gave smaller and midsize funds a good drubbing, making it especially difficult for many funds that, by charm, must fish in waters other than the big-cap stocks. The managers of the very largest funds do better than their smaller counterparts because they, by virtue of size, are stuck with big stocks. So by going a little heavier on the stronger stocks and replaying or ignoring the weaker ones, such funds can get a bead on the S&P. Fidelity Magellan Fund bested the index by 6 percentage points (table).

Why does the S&P perform so well? In rocky markets, many prefer larger companies with deeper pockets and more resources. Fund buyers themselves also feed the big-stock bias by tilting in index funds when they see the market doing so well. Robert Adler, chief of AMG Data Services tracks flows into funds, says inflows to S&P 500 funds have been robust since the market began to recover in mid-October, while inflows to small-company international funds.

BIG RETURNS AT THE BIG FUNDS

| FUND | NET ASSETS
BILLIONS | TOTAL
RETURN* |
|-----------------------------------|------------------------|------------------|
| FIDELITY MAGELLAN | \$73.9 | 23.53% |
| VANGUARD INDEX 500 | 69.5 | 21.93 |
| WASHINGTON MUTUAL INVESTORS | 50.3 | 14.78 |
| FIDELITY GROWTH & INCOME | 46.0 | 21.10 |
| INVESTMENT COMPANY OF AMERICA | 41.8 | 17.09 |
| FIDELITY CONTRAFUND | 34.8 | 20.94 |
| VANGUARD WINDSOR II | 30.9 | 11.41 |
| AMER. CENT.-20TH CENT. ULTRA INV. | 27.1 | 22.71 |
| VANGUARD WELLINGTON | 25.8 | 10.46 |
| FIDELITY PURITAN | 24.8 | 11.95 |

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan 1 through Dec. 11, 1998

DATA-MORNINGSTAR INC

Indeed, the performance gap between large-cap and small-cap funds has reached historically high levels. "This year, there's a 30 percentage-point difference between the performance of the S&P 500 and the Russell 2000 [a broad small-cap index]," says Theodore R. Aronson of Aronson & Partners, adviser for the Quaker Small-Cap Value Fund. "You'd have to go back to 1970 to find a gap like that between large and small caps, and before that, it's 1930."

To many investors, small-cap funds

are screamingly cheap. John Rekenenthaler, research director at Morningstar, says the strong performance of large-cap stocks, coupled with lagging returns from small-cap stocks, have distorted price-to-earnings and price-to-book value ratios as well. Rekenenthaler says large-cap funds own stocks with an average p-e ratio of 31, vs. 17.3 for small-cap funds; for large-cap funds, the p-b ratio is nearly three times as great, 6.4 to 2.2. Four years ago, large-cap and small-cap funds had nearly identical p-e ratios and the p-b ratios for large-cap funds were just 70%, not nearly 200%, higher.

PERFORMANCE BOOST. But this year, even having your money in

a large-cap fund was not enough. Large-cap growth funds trounced the total returns of large-cap value funds 24.87% to 7.53%. The reason: The growth funds owned a big slug of technology stocks, which did extraordinarily well, as did their pharmaceuticals and retailing stocks. Value funds typically own financial, energy, and industrial stocks, and those sectors were bombed during 1998.

By and large, the year's best results came from technology funds (table). Even the best performers—ProFunds

THE WORST RETURNS

| | TOTAL RETURN* | | TOTAL RETURN* |
|-----------------------------------|---------------|---|---------------|
| LEXINGTON TROIKA RUSSIA | -83.14% | BT INVESTMENT LATIN AMERICAN EQUITY | -38.38% |
| AMERICAN HERITAGE | -57.14 | WRIGHT EQUIFUND-MEXICO | -38.25 |
| FIDELITY SELECT ENERGY SERVICE | -52.02 | U.S. GLOBAL INVESTORS GOLD SHARES | -38.07 |
| EATON VANCE WORLDWIDE DEV. RES. B | -51.84 | BLACKROCK INTL. EMG. MKTS. INV. A | -37.88 |
| STATE ST. RESEARCH GLOBAL RES. A | -50.63 | IVY CANADA A | -37.82 |
| MONTGOMERY LATIN AMERICA R | -49.25 | EVERGREEN LATIN AMERICA B | -37.42 |
| POTOMAC OTC/SHORT | -49.02 | DREYFUS PREMIER AGGRESSIVE GROWTH A | -37.29 |
| VONTOBEL EAST. EURO. EQUITY | -48.79 | AIM GLOBAL RESOURCES B | -37.20 |
| EXCELSIOR LATIN AMERICA | -47.32 | COHEN & STEERS SPECIAL EQUITY | -36.61 |
| OPPENHEIMER REAL ASSET A | -46.09 | DELAWARE EMERGING MARKETS A | -36.52 |
| CRABBE HUSON SPECIAL A | -44.71 | WEBS INDEX MEXICO (FREE) | -36.35 |
| INVESCO LATIN AMERICAN GROWTH | -44.68 | WEBS INDEX MALAYSIA (FREE) | -36.29 |
| AIM LATIN AMERICA GROWTH A | -44.26 | VAN KAMPEN LATIN AMERICAN A | -36.01 |
| GOVETT LATIN AMERICA A A | -43.78 | AIM DEVELOPING MARKETS A | -35.87 |
| DREYFUS AGGRESSIVE GROWTH | -42.52 | ABN AMRO LATIN AMERICAN EQUITY COM. | -35.80 |
| TEMPLETON LATIN AMERICA I | -41.82 | KAMINSKI POLAND | -35.65 |
| FEDERATED LAT. AMER. GROWTH A | -40.32 | GOVETT EMERGING MARKETS EQUITY A | -35.62 |
| MERRILL LYNCH LATIN AMERICA B | -39.17 | EATON VANCE EMERGING MARKETS B | -35.33 |
| U.S. GLOBAL INVESTORS GLOBAL RES. | -39.13 | ROBERTSON STEPHENS GLOB. NAT. RES. A | -35.30 |
| MONTGOMERY EMERGING MKTS. R | -38.98 | IVY SOUTH AMERICA A | -35.16 |
| SMITH BARNEY EMERGING MKTS. B | -38.96 | CRABBE HUSON SMALL CAP A | -34.57 |
| TCW/DW LATIN AMERICA GROWTH B | -38.62 | T. ROWE PRICE LATIN AMERICA | -34.54 |
| FREMONT EMERGING MARKETS | -38.48 | MFS/FOREIGN & COLONIAL EMG. MKTS. EQ. B | -34.50 |
| AIM EMERGING MARKETS B | -38.42 | TCW/DW EMG. MKTS. OPPORTUNITY A | -34.33 |
| FIDELITY LATIN AMERICA | -38.40 | MERRILL LYNCH DEVELOPING CAP. MKTS. B | -33.81 |

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 1 through Dec. 11, 1998.
MORNINGSTAR INC.

THE INVESTMENT SPECTRUM MUTUAL FUNDS

UltraOTC Investors, up 141.27%, and Potomac OTC Plus, up 85.76%—are really de facto tech portfolios. Both funds track the NASDAQ 100 index, and 6 of the 7 largest stocks in that index are tech companies; the seventh, MCI WorldCom Inc., is tech-related. Those seven stocks make up about 52% of the weight of the index—No. 1 Microsoft Corp. alone accounts for 23.7%—leaving the other 48% to the next 93 companies. That index zoomed 69.1% this year.

What drives these funds' index-beating performance is that their managers use futures and options to boost returns; Potomac is designed to deliver 1.25 times the index, and the ProFunds portfolio twice the index. Both companies also run mirror-image bearish funds, designed to profit when their underlying indexes fall.

But other than leveraging the indexes, there weren't too many ways to beat the index of late. "Select" or "focus" funds proved one way. Rather than buy hundreds of stocks, these funds concentrate on as few as 20 and build larger stakes. Among these select winners are Berger Select, up 62.08%; Janus Twenty, up 54.99%; and Marsico Focus, up 38.9%.

Janus-managed funds, both the focused and more diversified, enjoyed especially strong returns. "Our roots as a company are in picking growth stocks, and it all came to the forefront this year," says Scott W. Schoelzel, Janus Twenty Fund manager. "We did well with cable, telecom, technology, and biotechnology." He also manages IDEX Growth A, up 47.42%, and ASAF Janus Capital Growth B, up 43.92%—both large-cap funds.

A few small-cap funds earned bragging rights. Schroder Micro Cap Investors, for instance, gained 54.7%. Its secret? Portfolio manager Ira L. Unschild raised cash in June and bought put options on the Russell 2000 index. Not only did he skirt the decline, but the fund also cashed in on the options. He started to buy again in October.

Every year, some funds have stunning reversals of fortune, and 1998 is no different. Lexington Troika Russia Fund was up 67.4% in

THE BOND-FUND LEADERS

TAXABLE FUNDS

| | TOTAL RETURN* |
|--------------------------------|---------------|
| VONTOBEL EAST. EUROPEAN DEBT | 24.05% |
| AMER. CENT.-BENHAM TGT. 2025 | 22.63 |
| MANAGERS GLOBAL BOND | 19.40 |
| MUNDER INTERNATIONAL BOND A | 18.84 |
| AMER. CENT.-BENHAM INTL. BOND | 18.72 |
| AMER. CENT.-BENHAM TGT. 2005 | 18.28 |
| GUINNESS FLT. GLOB. GOVT. BOND | 18.17 |
| NORTHERN INTL. FIXED-INCOME | 17.40 |
| PACIFIC ADVISORS GOVT. SECS. A | 17.18 |
| RYDEX U.S. GOVERNMENT BOND | 17.06 |
| AVERAGE OF 1380 FUNDS | 4.70 |

TAX-FREE FUNDS

| | TOTAL RETURN* |
|--------------------------------------|---------------|
| CITIFUNDS NATL. TAX-FREE INC. | 10.07 |
| EXEC. INVESTORS INS. TAX-EXMPT. | 8.17 |
| FRANKLIN MI TAX-FREE INCOME | 7.69 |
| AMER. CENT.-BENHAM CA L-T T/F | 7.68 |
| LORD ABBETT TAX-FREE INC. GA A | 7.65 |
| DUPREE TN TAX-FREE INCOME | 7.51 |
| VAN KAMPEN NY TAX-FREE INC. A | 7.40 |
| DELA.-VOYAGEUR TAX-FREE CA A | 7.40 |
| FIRST INVST. MULTI-ST. INS. T/F NC A | 7.40 |
| FRANKLIN CA HIGH YIELD MUN. I | 7.38 |
| AVERAGE OF 1546 FUNDS | 5.45 |

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 1 through Dec. 11, 1998

DATA: MORNINGSTAR INC

1997. Thanks to Russia's well-publicized plunge into an economic black hole, it's down 83.14% this year. American Heritage Fund, 1997's top performer with a 75% gain, fell 57.14% in 1998. On the other hand, Matthews Korea I, down 64.5% last year, now looks stellar with its 78.85% recovery. But an investor who bought that fund at the beginning of 1997 is still down 38% on his original investment. South Korea is looking up, but many emerging markets are still ailing, and so are the funds that invest in them.

The market turmoil has humbled many veteran fund managers. Look at Montgomery Emerging Markets R, with a -38.98% return, vs. -28.76% for the average emerging-markets fund.

"We were out of Asia early in the year and so we missed some of the bounce back," says co-manager Josephine Jiménez. "And we thought Latin America would do better." The fund is selling some money out of Brazil, which is heading for recession, and sending it to Asia, where Jiménez thinks countries such as China, the Philippines and South Korea are on the mend.

Perhaps one of the most bizarre turns is the resurrection of the Steadman Funds. Two of these perennial losers jumped to the best-performers list, following last year's death of manager Charles W. Steadman. Steadman was a pretty good stock picker, but he traded too much and paid up high costs," says Max Katcher, Steadman's chief operating officer. Katcher says he has culled the portfolios, slowed trading and renamed the funds. He'll try to make some funds profitable this year, but Ameritor Security Trust, with losses of 7.3%, will be a tough sell—even if it did earn over 50%.

Most investors will take a pass on the former Steadman funds but their reappearance among the winners might be an omen: these funds can beat the index, there's still hope for the 90% of fund managers who haven't.

By Jeffrey M. Leachman in New York

A WIDE RANGE IN FUND RETURNS

| | TOTAL RETURN* | | TOTAL RETURN* |
|----------------------|---------------|---------------------------|---------------|
| TECHNOLOGY | 34.20% | MID-CAP VALUE | -3.22% |
| COMMUNICATIONS | 30.25 | SMALL-CAP GROWTH | -5.02 |
| LARGE-CAP GROWTH | 24.87 | DIVERSIFIED PACIFIC/ASIA | -7.55 |
| LARGE-CAP BLEND | 14.85 | SMALL-CAP BLEND | -9.20 |
| HEALTH | 13.09 | SMALL-CAP VALUE | -10.70 |
| UTILITIES | 13.03 | PACIFIC/ASIA EX-JAPAN | -11.70 |
| EUROPE | 11.78 | PRECIOUS METALS | -14.95 |
| DOMESTIC HYBRID | 8.47 | REAL ESTATE | -17.47 |
| LARGE-CAP VALUE | 7.53 | NATURAL RESOURCES | -28.11 |
| FOREIGN | 7.00 | DIVERSIFIED EMERG. MKTS. | -28.76 |
| MID-CAP GROWTH | 6.69 | LATIN AMERICA | -37.97 |
| WORLD | 6.60 | S&P 500 | 21.87 |
| INTERNATIONAL HYBRID | 6.45 | U.S. DIVERS. EQUITY FUNDS | 6.99 |
| UNALIGNED | 4.47 | ALL EQUITY FUNDS | 5.04 |

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 1 through Dec. 11, 1998

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SO LONG, EASY PLAYS

The Treasury rally may be over, but munis and high-yield bonds could offer good returns

Investors who enjoyed double-digit returns from U.S. Treasury bonds in 1998 will have to accept more risk if they hope to get similar gains in the coming year. Either that, or settle for single-digit normality.

The currency crises that swept Asia, Russia, and Latin America this past summer and fall triggered a mad stampede out of any bonds that were seen as even slightly risky. Money poured into Treasuries, raising their prices and pushing their yields down to levels not seen in a quarter-century. While Treasuries still offer the ultimate safe harbor from the global maelstrom, many experts believe that with 30-year government bonds now yielding 5%—or roughly half the level of a decade ago—the great Treasury rally of the '90s may have run its course.

In contrast, there's plenty of room for appreciation in the sectors that fell into disfavor in 1998, including high-yield corporate bonds and municipal bonds. "It's a fun time to be a bond-fund manager," says Michael J. Mill-

house, who manages \$17 billion in bonds for Loomis, Sayles & Co. "I'm excited about coming to work and finding bonds to buy."

The trouble, of course, is that there's a good reason those sectors are cheap:

tions in the official interest rates were good for most fixed-income securities in 1998. True, owners of 30-year Treasuries did the best, with a total return of 17% for the year through Nov. 3. But Lehman Brothers Inc.'s overall government bond index was

a strong 9.6%, and its overall corporate bond index climbed 8.3%. On the downside, Merrill Lynch & Co.'s high-yield bond index advanced only 3.3% through November, and J.P. Morgan & Co.'s emerging markets bond index declined 12.3%.

The consensus among the bond mavens interviewed by BUSINESS WEEK is that inflation will remain low and official rates will be reduced further in 1999. With global contagion likely to slow U.S. growth to roughly 2% next year, the Fed

eral Reserve will be called upon to cut the federal funds rate—the price the Fed targets for overnight interbank loans—from 4.5% to 4% or lower.

But absent a complete collapse of the U.S. economy—which no one is forecasting—most bond pros believe that long-term Treasury yields are



They're vulnerable to another flight to quality by panicky investors. "The markets are so volatile that it's difficult to have enough confidence to bet the farm on anything," notes Ian MacKinnon, fixed-income chief for the Vanguard Group.

Continued low inflation and reduc-

SMART BOND BUYS

| SECURITY | RECOMMENDATION | RATIONALE | YIELD-TO-MATURITY |
|-------------------------|------------------------------------|--|-------------------|
| U.S. GOVERNMENTS | Ten-year Treasuries | With yield curve flat, offers best chance for appreciation if Fed cuts rates further | 4.6% |
| MUNICIPALS | California state 5%'s of 2010 | Higher return than 10-year Treasuries—and tax-free status gives them effective yield of 7.8% or higher | 4.70 |
| CORPORATE | Sak's 7½%'s of 2004 | New owner Proffitt is sure to bring high-end retailer's cost structure down | 7.03 |
| HIGH-YIELD | Global Crossing Ltd. 9½%'s of 2008 | Owner of undersea fiber-optic cables likely beneficiary of global telecom boom | 9.4 |
| FOREIGN MARKETS | Brazil 10½%'s of 2027 | The International Monetary Fund won't let Brazil fail | 15.2 |



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BONDS

likely to drop much further and could rise. "We're likely to see lower short-term rates, but long rates are about as low as they can go," says Millhouse. A better play in Treasuries may be intermediate bonds—those with 3- to 10-year maturities.

WILD CARD. One sector that many experts are bullish on is municipal bonds. Because they're exempt from state and federal taxes, their yields are usually lower than those of Treasuries. But Treasury yields have fallen in the flight to quality, so much so that many long-term municipals are yielding as much as Treasuries. Any investor with a combined 40% tax rate can enjoy an effective yield on munis that's a couple of percentage points higher than the effective yield on comparable Treasuries. For instance, Long Island Power Authority's 5½% bonds maturing in 2022, trading slightly below par, would provide a return for high-net-worth investors equal to that of a taxable bond yielding 8.4%. Other state bond issues

worth mining are those from California, Massachusetts, and Texas.

And for investors looking to stock their retirement plan, corporate bonds offer even higher returns. The wild card here, however, is how much the U.S. economy softens in 1999. Early in this decade, corporates took a bath as investors began selling in anticipation of widespread defaults.

The trick, then, is to pick corporates that are less vulnerable to global contagion. Vanguard's MacKinnon recommends regional banks and electric utilities for taxable accounts. John Bender, co-manager of the Strong Corporate Bond fund, likes Cendant Corp., the Parsippany (N.J.)-based franchising giant that fell out of favor earlier this year due to an accounting scandal at its merger partner CUC International. Bender argues that Cendant's cash flow from its hotel and real estate franchise operations remains relatively stable, which makes the five-year note it floated in November a good value. That

note, yielding 7.4% in mid-December, has a "reset" feature, so if it loses its investment grade rating, the coupon resets at an additional 1.5 percentage points.

Investors with a greater appetite for risk should consider wading into the high-yield pool, particularly since the yield on Merrill Lynch's junk-bond index is 5.45 percentage points above Treasuries vs. the 4.25 historical average. "Even if you don't see a lot of capital appreciation in high yield, as all you do is earn the coupon, you still do as well as you'll probably do in equities," says Margaret Patel, portfolio manager of the Third Avenue High Yield Fund.

The safest plays in the junky can be found in the telecommunications industry, which, given the explosive growth of the Internet and other digital services, is expected to continue expanding regardless of what happens to the broader economy. Bender, co-manager at Strong, Jeffrey Kotler

BEST BET

★ **MUNI MARVEL** Many experts contend that municipal bonds can outperform Treasuries next year. State issues that may be worth mining include those from California, Massachusetts, New York, and Texas.



rs Nextlink Communications, Metroia Fiber Network, Global Crossing. al, for example, yielding 9.4% in December.

FRAGED. Many of bond mavens surd were relatively to asset-backed rities, particularly gages, given the ively low yields ongoing prepayt risks as homeers refinance. ng other plays, ouse likes the of several real es-investment trusts, ding Equity Office erties Trust and inion Real Estate. rs are much less aged than they in the 1980s," he

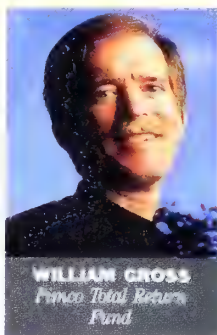
the pros are cool sset-backed securities, they're ight cold on foreign markets. most European short-term rates dy below 4%, experts see little for further gains. The exception

FOR THE RECORD

WILLIAM H. GROSS, manager of the \$23 billion Pimco Total Return Fund, has been an unabashed "bond bull." But he's growing cautious.

ON THE BOND MARKET: "The bull market in [Treasury] bonds is done. There's only so much juice you can squeeze out of an orange, and I think we're about there."

ON MUNICIPAL BONDS: "There aren't that many no-brainers in the stock and bond markets, but this is one. Short of Congress enacting a flat tax, it's hard to conceive of a scenario where a muni won't outperform Treasuries."



WILLIAM GROSS
Pimco Total Return Fund

ON INFLATION: "As long as we have excess capacity and low commodity prices, I think inflation is dead. Well, it's not dead, but it's like a vampire in a casket—waiting to come out in the middle of the night. But that's years away."

ON CORPORATE BONDS: "The corporate market is a little risky here. We're going to have a slowdown, and that's never been a good time to hold corporates."

A slowdown has "never been a good time to hold corporates"

money is behind. From now on, bigger returns won't come without bigger risks.

By Dean Foust
in Atlanta

At Dana Corporation, there's only one way to look at any vehicle. From underneath. Because that's where you'll see the innovative Dana systems and components that help car, truck and off-highway

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RETURN OF THE REITs

Yes, they've lost some luster, but the property market should smooth out in '99

This was no mere correction. For real estate investors, 1998 was an all-out disaster. That supposedly stable, predictable group of stocks called real estate investment trusts is down 18% for the year—including dividends. That's a 39% relative underperformance to the Standard & Poor's 500-stock index. "REITs haven't been this cheap since the gulf war," grumbles Cydney Donnell, manager of \$2 billion in real estate investments for European Investors Inc.

The good news is that no underlying real estate crisis is on the radar. REITs should finish the year with cash-flow growth of 15%, according to Green Street Advisers, a research firm. In 1999, growth is expected to slow to a still-solid 9%. Even if the cash-flow multiples of REITs stay at the current historically low level of 8.7, their stock prices should climb 9%, says analyst Steven Hash of Lehman Brothers. On top of that, investors should pick up an average 7% dividend. "It is not high-five time, but it's easy to look out and see 10% returns," says Russell C. Platt, manager of the well-regarded Morgan Stanley Dean Witter real estate mutual funds.

PANIC ATTACK. What went wrong in 1998? It's pretty simple: an upward surge of REIT prices—56% during 1996 and 1997. By 1998, though, the opportunity to make profitable acquisitions was ending while new developments were increasing. Nervous investors proceeded to dump REIT stocks.

High-profile missteps compounded the nervousness. Prime examples were Richard E. Rainwater's Crescent Real Estate Equities Co. and former hotel highflier Paul A. Nussbaum's Patriot America Hospitality Inc. They acquired more than they could manage, then financed their growth with short-term debt. Not only was the equity faucet shut off for public REITs but also this summer's global economic jitters practically



shut down the commercial mortgage-backed security market, a main source of financing for private developers.

Fortunately for investors, many of the better companies have been brought down as hard as their mediocre peers. The best place to look for values is the battered office sector. With unemployment hitting record lows, rents are still growing by 6%. But office stocks have been brought

down an average 20% to date. So Zell's giant Equity Office Properties Trust, with \$13 billion in assets and now selling at a 6% discount to its estimated breakup value, is a favorite pick. So is Mack-Cali Realty Co. The company's holdings are concentrated in the attractive Northeast markets. But its stock has still been hammered, 25% year to date.

For those willing to forego REIT dividends, go for Canada-based TrizecHahn Corp., whose fleet of trophy office properties includes Chicago's Sears Tower. Because it is not a REIT, Trizec can store more earnings. It also made a deal of the year selling a portfolio of malls last spring for \$2.5 billion. That gives it a war chest when its peers are hungry for capital.

Retail REITs held up well in the sell-off. But Simon Property Group, the dominant mall operator, can still be bought at a 6% discount to its underlying assets, according to Merrill Lynch analyst Eric Hemel. And while still a mall giant Kimco Realty Corp. is cheap, it has been buying up bankrupt retail space and is expected to report cash-flow growth of 19% in 1999. In apartments, money managers like Dac Jellison of this year's top-performing Columbia Real Estate Equity Fund are sticking with big diversified players like Denver-based Apartment Investment Management Co. and Archstone Communities Trust.

For those with guts, there is always the hotel sector, down 45% year to date. Hotels are most susceptible to economic slowdowns. Still, Host Marriott Corp., a big blue-chip name, is worth a look. The company, which is converting to a REIT in January, is trading at only six times its 1999 cash flow.

Across the board, real estate stocks have been repriced from growth companies to slow-growth companies. But at least REITs' reduced expectations are now reasonable.

By Kathleen Mc
in Los Angeles

TOP PROPERTY PICKS

| | PRICE | PRICE/
CASH FLOW* |
|-----------------------------------|-------|----------------------|
| ARCHSTONE (ASN) | 20% | 10 |
| EQUITY OFFICE (EOP) | 24% | 9.6 |
| HOST MARRIOTT (HMT) | 14% | 6 |
| MACK-CALI (CLI) | 30% | 9.3 |
| TRIZEC HAHN (TZH) | 19% | 9.6 |
| SIMON PROPERTY GROUP (SPG) | 28% | 9.2 |

* 1999 operating cash flow vs. current price

DATA: FIRST CALL

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THE NET'S BURIED TREASURE

There's plenty of trash out there, but regulators and others offer terrific stuff for free

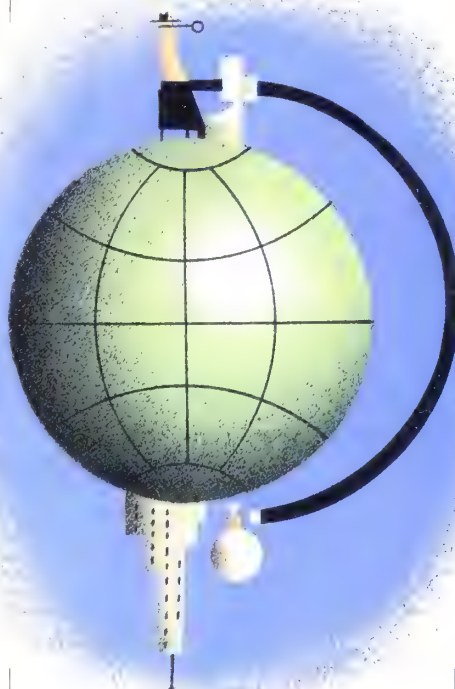
Online investing is growing up fast. What used to be a marginal pastime for a few devotees has become almost a necessity, particularly for investors venturing into high-tech and small-cap stocks. Internet message boards, derided as "chat rooms" in the press, can and do move markets. And though stock promoters continue to infest the Internet, sometimes via mass "spam" E-mailings, tough action by the Securities & Exchange Commission and other regulators has put the shadiest operators out of business.

Separating the online wheat from the chaff remains a challenge, however. Message boards are still a worthy source of investment information—and drivel. A growing number of Web sites offer staff-produced content—and much of it, often, is free of charge. (The McGraw-Hill Companies operates several such sites, including Business Week Online and S&P Personal Wealth—www.businessweek.com and www.personalwealth.com.)

WHAT A DEAL. The best bargain on the Web, at least for investors, is easy to pick. The laurels for that go to the SEC's EDGAR Web site, from which investors can instantly retrieve the SEC filings of virtually every public company and mutual fund (www.sec.gov/cgi-bin/srch-edgar). Don't take EDGAR for granted—those same documents can cost hundreds of dollars from document-retrieval services. Investors can also peruse recent commission actions against rogue brokers—and pending SEC rules if you're having trouble getting to sleep at night.

The SEC's regulatory brethren offer some useful Web sites of their own. The best of the lot are the sites operated by the National Association of Securities Dealers, its subsidiary NASD Regulation, and the newly merged NASDAQ Stock Market and American Stock Exchange. The Web site of NASD Reg-

ulation's Public Disclosure Program (www.nasdr.com/2000.htm) is a good starting point for investors seeking to hire a full-service broker. The NASD can provide, by E-mail, the disciplinary and arbitration record of every broker.



Monthly announcements of disciplinary actions against firms and brokers can also be checked at NASD Regulation, as well as at the New York Stock Exchange's Web site (www.nyse.com). The NASDAQ-American Stock Exchange Web site (www.nasdaq-amex.com) provides company information and stock quotes, as do several commercial sites that are, for the moment at least, free. For market-news summaries, one useful site is CBS MarketWatch (cbs.marketwatch.com/news/newsroom.htm). But for company-specific information, a better Web site is Hoover's Online (www.hoovers.com), operated by a firm noted for its corporate reference works. En-

ter a company's ticker symbol and get links to eight online news outlets plus the companies' own press releases. Hoover's also has an easy-to-stock screener for investors seeking, say, stocks with low price-to-book ratios.

CYBER-SPITBALLS. Hoover's Online another feature that is attracting a following among pros and small investors alike—IPO Central (www.ipocentral.com). This site provides listing, updated daily, of every recent and pending initial public offering. Prospectuses are available via links to EDGAR. A nifty feature is the "power search" that lets you sort by underwriter and check out pricing and track records of their recent IPOs.

Investors who like to do their own research sometimes like to browse the Internet message boards. "Usenet" bulletin boards linked by the Internet, such as misc.invest.stock, have become a backwater in recent months. Far more useful are Web-based boards. The granddaddy of these is Silicon Investor (www.techstocks.com), but more comprehensive is the Internet's tower of investment babble, the message board Yahoo! (messages.yahoo.com/yahoo/Business_and_Finance) Yahoo! has message boards for more than 8,400 stocks, controversial small companies getting far more traffic than well-held companies. The IBM message board, for example, has about 60 messages posted, while the board for Hemispherx BioPharma Inc., a biotech company, has 9,300. Shorters and company aficionados duke it out on the Yahoo! boards, lacing up postings with detailed information links to Web sites, and plenty of vile name-calling. It can make for intriguing reading—for while the Internet has come of age, many of its users have not.

By Gary Weiss in New York

BEST BET

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18. Rockwell Corporation
19. Savin
20. THUNDERBIRD - The
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School of International
Management
21. Toyota
22. Toyota in America

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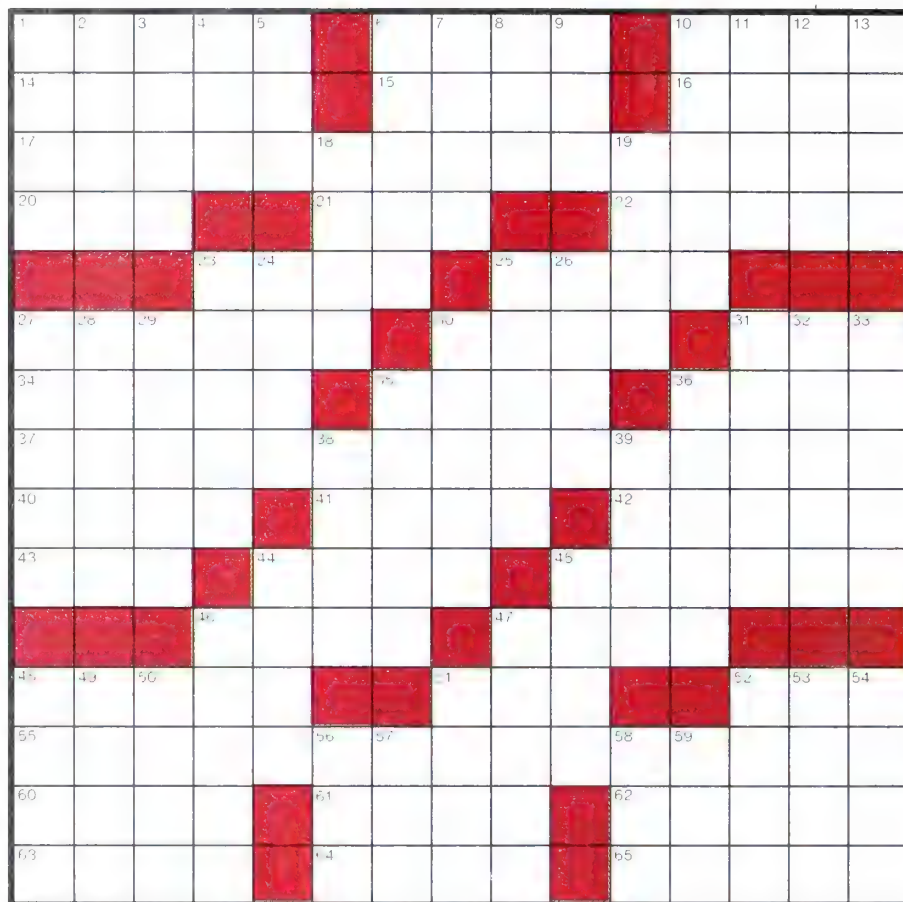
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Development Council
- Fairchild-Dornier, Inc.
- Singapore
Telecommunications Ltd.

LOGISTICS

- Special Advertising Section
- 23. JDEdwardsSCOREx
- 24. Roadway Express, Inc.
- 25. USPS Global Delivery
Services
- 26. Yellow Freight

Mixing Business with Pleasure by Lincoln

Puzzle #4



ACROSS

1. "The Seven Habits of Highly Effective People" author
6. Like most colleges
10. Multientom competitor
14. Give a speech
15. In the past
16. M __ "Microsoft"
17. Mutual-fund manager's concern
20. It may be odd or round
21. Open Door Policy proponent
22. Reads bar codes
23. Keeps cool, as champagne
25. Cable alternative
27. Part of corporate Web site names
30. Utah national park
31. __ Alamos
34. __ Day (tree-planting time)
35. What Vitamin K helps blood do
36. "__ derriere" (see page at right)
37. Rome's airport
40. Very long time
41. Price of admission, at times
42. Store's sale sign small print
43. Compass reading
44. Kmart's hometown
45. Macanudos and Montecristos
46. Regard

47. PAC beneficiaries

48. Radio-studio sign

51. Prefix for content

52. After taxes

55. Early-retirement incentive

60. Be the boss

61. Pella Corp.'s home

62. Gold unit

63. Canadian oil company

64. Tenure of office

65. Got up

DOWN

1. Black Hills Corp. product

2. Phrase of approximation

3. Like some holdings

4. Season in Montreal
5. So far
6. Participants in an ongoing corporate "war"
7. Word often preceding a price in ads
8. Galbraith's field: Abbr.
9. CPQ bought it in '98
10. Computer-processing unit
11. Pacific Rim locale
12. Food __ (Southern supermarket operator)
13. Hospitality-industry units
18. Attention-getting sound
19. Part of NAM
23. Windows pictures
24. General-store owner in old coffee commercials
25. Semiconductor, for example
26. Tiny amount
27. Valleys
28. Billion-selling cookies
29. Steak order
30. Money in Warsaw
31. TV reporter Ellerbee
32. Come to pass
33. LP flaws
35. Web music store
36. NBA or NHL franchise
38. Steak order
39. Colorado resort
44. It's often belted
45. Cryogenics' milieu
46. Blockbuster rental
47. The U.S.'s first international airline
48. Mean sort
49. Entre __ (confidentially)
50. "__ fair in love and war"
51. Bryn __
52. Prefix for second
53. Big name in housewares
54. Prepared to drive
56. Wit or picker preceder
57. Garden tool
58. Brillo competitor
59. Pizza __

For answers to this puzzle:

Turn to page **172** in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.



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THESE PRICES ARE SURREAL

The art market's climb looks unstoppable. But if you can do without a van Gogh...



LUST FOR LOOT: Van Gogh's \$71.5 million self-portrait



PERSONAL VALUES: This Magritte fetched \$7 million

art prices. To be sure, Asian and Latin American buyers are scarce. But collectors elsewhere remain unchastened. The London-based *Daily Telegraph* Art 100 Index, which traces prices of

stock market correction in the U.S. Europe could easily clobber art prices at any time. Another constant worry among buyers is that a deepening of the world financial crisis could encourage Japanese buyers to flood the market with too much art. A single painting by van Gogh called *Portrait of Dr. Gachet*, which sold for an all-time record of \$82.5 million in 1990, has been up for sale privately for months. The minimum asking price: \$80 million.

The fall auctions in New York in November demonstrated that the works by well-known artists still fetch such prices. The top lot of all, an oil self-portrait believed to be the one painted by van Gogh, sold for \$71.5 million.

The Christie's International auction in London on the afternoon of Dec. 8 wasn't for the faint-hearted. It featured daring "Brit Pack" works by young London-based artists from the cutting-edge collection of advertising baron Charles Saatchi. Among the pieces gavelled down at astonishing prices were Damien Hirst's *The Lovers*, four jars filled with cow organs in formaldehyde that went for \$229,350, and a plaster cast of the underside of a sink by Rachel Whiteread that fetched \$220,275, nearly three times the pre-auction high estimate. For the first time, a work of performance art sold at a major auction: The buyer paid \$13,000 for a viewing and rights to perform it in the future.

The London sale illustrates the millennium fever gripping the world art market. The Asia crisis, tanking emerging markets, stock jitters, and slowing economies in the U.S. and Europe haven't stopped the upward swing in

works by 100 top artists, rose 26% through November, double the rise for all of 1997. "The market is extremely strong," says New York dealer David Nash, a former Sotheby's top gun. "There's a lot of money around, most of it in the hands of Americans and Europeans—with Americans clearly dominant."

GLUTTED. High rollers who venture out into this market, however, should know that it's a little like buying stock with the Dow not far from 9000. The art market has been getting ever more treacherous for over a year now. This isn't to say that there are bargains in every segment. But some buyers, especially those shelling out fast bucks earned in booming stock markets, may be overpaying. A prolonged

THERE ARE STILL SOME BARGAINS TO BE FOUND, SAYS COLLECTOR SCOTT BLACK



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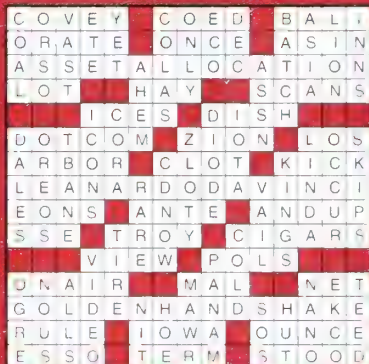
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Mixing Business with Pleasure by Lincoln



Answers from puzzle #4
in Business Week.

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ART



RECORD PRICE: *Man Ray's Noire et Blanche*

million. Experts had expected it to go for perhaps \$25 million, but a bidding war between two unidentified buyers drove the price into the stratosphere. And René Magritte's *Personal Values*, one of his masterpieces, went for \$7.1 million, a record for the artist.

But there were also bargains to be had. Los Angeles collector Eli Broad snapped up *Dry Run*, a 1963 Robert Rauschenberg silk screen over photographic images for just under \$1 million, which wasn't much more than the pre-auction minimum estimate.

THE WYNN FACTOR. Many collectors see more value than usual in Impressionist works, which rose by only 9% this year in the *Daily Telegraph* survey. Real gems still cost a bundle: A sun-dappled boating scene by Claude Monet, *Boatmen in Argenteuil*, brought in \$9 million, vs. a \$6 million to \$8 million pre-auction estimate. But Christopher Burge, chairman of Christie's North and South America operations, notes that the Japanese are now parceling out the troves of Renoirs and other works they paid millions for in a late-'80s frenzy, in an attempt to avoid tanking the market for any given painter. "It has taken a long time to get the banks and insurance companies who own the paintings to accept that they have to come way down on price," Burge says. Perhaps the most active buyer is Las Vegas impresario Steve Wynn, who art dealers

figure has laid out \$300 million over the last year of Impressionist art to displace his casinos.

Indeed, there are more good Impressionist-era paintings available now than at any time since the 1980s—but buyers still must be patient. Boston money manager M. Black, a careful and experienced collector, dropped out of the bidding for a net that eventually sold for \$2.4 million. But he ended up getting good prices on other works by Emile Bernard, Toulouse-Lautrec. Art spied values among so-

the paintings he didn't bid on, not a beautiful Sisley that went for \$600,000, a fraction of its price in the 1980s. "I was pleasantly surprised," says. "You can buy good paintings at reasonable prices."

The tab for an Impressionist work,

course, is still way off the charts for most collectors. A better bet this year is to buy buyers on a budget. The red-hot contemporary art market. The L Saatchi sale demonstrated two key trends: The temporary market is rapidly globalizing, and art from the 1990s has substantial resale value at auction. Some controversial 1980s artists also are making a bit of a comeback: Works by Jeff Koons, whose durability had been doubted, jumped. And a self-portrait by 1980s pop artist Jean-Michel Basquiat soared to \$3.3 million.

The key to getting a good value, however, is to catch a trend early. One way is to monitor

museum purchases and shows of artists—often a sign that an artist is about to rise. For instance, the gallery owner Victoria Miro recommends Peter Doig, a young painter whose work is getting a museum in Berlin in 1999. Josh Baer, editor of *Baer Fax*, a Manhattan-based art newsletter, singles out Los Angeles artist Charles Ray, who had a retrospective this summer at the Whitney. Prices of Ray's works skyrocketed



DRY RUN: *Rauschenberg for less than a million*

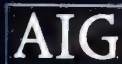
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THE
PRINCETON
REVIEW

to \$200,000 at auction this autumn.

A leading-edge collector like New York money manager Arthur Goldberg, however, bought his Charles R. Jones years ago, at a fraction of that price. Goldberg is buying today's high on Olafur Eliasson, a young Icelandic photographer who has shown widely only in the last few years and whose works are now on exhibition at New York's Museum of Modern Art. Eliasson also showed this year in an annual ranking of new artists compiled by the *Artforum* magazine *Capital*.

"UNDERAPPRECIATED." Another niche worth emulating is to buy works of established painters who have fallen out of favor. Lately, for instance, Goldberg has been buying works of de Kooning from the late 1960s and 1970s. Drawings from this late period of the artist's life are "underappreciated," he says, and sell for \$15,000 to \$20,000. San Francisco dealer Richard I. Fisher recommends paintings on paper by late artist Sam Francis, available for as little as \$15,000.

These days, photos in general tend to be excellent buys. Goldin is buying photos by Harry Callahan, who in his 80s, Callahan's new work goes for as little as \$2,500 and is "badly undervalued," he says. But some classics are going for unprecedented prices. *Noire et Blanche, Paris (Positive Negative)*, 1926, a haunting study of a woman's head by the surrealist Marc Chagall, set an all-time record for a photo when it sold for \$607,500 at auction this fall. And-comes, obviously, are far more affordable. And Victoria Miro, who does many hot Brit Pack artists, points to Thomas Demand, a little-known photographer who has just done a film that will be shown at the Tate Gallery in February. Photographers on the *Artforum* list include German Andreas Gursky and American Nan Goldin.

The lesson is that for a careful collector, art may be a less risky investment than most. After all, if you do what the experts recommend, you'll study up on a few artists you really love, for whom the investments that may hang on the wall for the long term. Jerome Eckstein, a London art investment consultant, figures even conservative Master paintings appreciate by 12% annually. Impressionist works have gone up by 15% annually, he says. Savviest collectors never stop buying through good times and bad. But these days they're buying warily.

By Thane Peterson in France

ENE G. MARCIAL

THE EMISSARIES SITTING ST. PAUL?

ne very interested suitors may be taking a close look at St. Paul Bancorp (SPBC). So say several pros on lookout for takeover bait. They see St. Paul's days as an independent savings bank holding company numbered: "There are indications a deal is brewing," says one investment manager who has been accumulating shares. He says that St. Paul executives have had informal talks with other banks, including the Netherlands' ABN Amro and Charter One Financial, which has offices in Michigan, Ohio, and western New York. BankAmerica is also reported to be interested.

Analysts, too, see a buyout in store for Paul, the largest thrift in Chicago with 65 branches and a network of more than 550 automated teller machines. Says Thomas O'Donnell of Salomon Smith Barney: "We believe the favor St. Paul being acquired—ends in the near term." Timothy A. G. Edwards agrees. He says the downside risk in buying stock in St. Paul with total assets of nearly \$6 billion appears modest, given the potential for an earnings rise—or a takeover. Fundamentals alone, Willi thinks the stock now at 22, is worth 25. In a buyout, Paul should fetch 35, he adds. This year, the stock has slid 13%. O'Donnell notes that St. Paul recently put in place a cost-cutting plan that could boost earnings by 15¢ a share. "Commendable as the move is," he says, the move "may be a little late" to protect St. Paul from a possible takeover. The cost-cutting plan was announced after big investors demanded that management consider selling the company. Pfeiffer Managers, an investment firm that owns 3% of the stock, has filed a shareholder resolution urging management to sell. It noted that St. Paul Ban-

corp has scarcely earned a competitive return in the decade since it went public.

Willi figures St. Paul will earn \$1.45 a share this year and \$1.55 in 1999. Spokesman Bob Williams says the company would respond "very responsibly" to any offers, but declined comment on whether it has received any.

WHY BROOKSTONE IS SUCH A BARGAIN

Practically every retailer has gone online to take advantage of heavy E-commerce on the Net. Brookstone (BKST) is no exception. But the potential of its Web-site business has yet to be recognized and tapped, says one New York money manager who has been loading up on stock—but for one other reason: He thinks Brookstone is an alluring takeover target. A specialty retailer of personal-care items, lawn and garden tools, and recreational products, Brookstone sells through catalogs and at 194 stores in 36 states, at regional malls, airports, and resorts.

This pro figures that on earnings growth alone, the stock is worth twice its current price of 11. Indeed, the stock is trading at less than twice its book value of more than \$7 a share, compared with an average of six times book value for companies in the Standard & Poor's 500-stock index. And Brookstone's price-earnings ratio is 9 to 10—quite low, analysts say, given the company's earnings growth rate of more than 20% in each of the past three years. And then there is the huge potential, they say, in Brookstone's small but growing and profitable Internet business.

Janet Kloppenburg, an analyst at BancBoston Robertson Stephens thinks that Brookstone stock is a bargain. And she adds that the low price doesn't reflect the rapid earnings growth she foresees at Brookstone. For fiscal 1999, she estimates Brookstone will earn \$1.27 a share. Analyst Barbara Miller of BT Alex. Brown sees Brookstone climbing to 19 or 20 in a year—or even six months.

CHS HOISTS ITS SAILS FOR AMERICA

For CHS Electronics (HS), the world's third-largest distributor of computer products, Europe is the main market, generating 75% of sales. And as the euro currency draws nigh and as demand soars for computers that are adjusted for use in the new millennium, CHS should see robust growth. The company's remaining sales are 20% in Latin America and 5% in Asia.

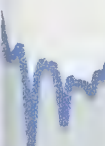
CHS is well positioned to take advantage of the coming demand for post-2000 computers, says CEO Claudio Osorio. Also on his agenda, however, is a plan to enter the U.S. Although the American computer market is considered mature, a U.S. entry could boost CHS sales. CHS, whose revenues, bolstered by acquisitions, have jumped from \$4.8 billion last year to \$8 billion this year, serves some 120,000 resellers in 46 countries.

CHS may enter the U.S. through an acquisition, says Robert Damron of Cleary Gull Reiland & McDevitt, a securities firm in Milwaukee, who believes the company is eyeing two U.S. wholesalers of computer products, each of which generates annual sales of about \$5 billion. The two main rivals of CHS, Ingram Micro and Tech Data are the dominant sellers in the U.S.

Although either of the two could block a CHS entry into the U.S. by launching a buyout bid for CHS, analysts don't see that a realistic possibility. Osorio declines to comment on whether either has approached him.

Meanwhile, the stock, now at 15, could snap back to its old high of 30, says Damron, based just on its internal growth rate of 15% to 20%. He figures CHS will earn \$1.80 a share this year and \$2.10 in 1999, vs. 1997's \$1.32.

THE ROAD NOWHERE

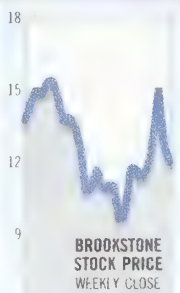


ST. PAUL
BANCORP
WEEKLY CLOSE

15, '98 DEC. 15
ARS

DATA: BLOOMBERG FINANCIAL MARKETS

ITS WEB PROMISE IS UNTAPPED

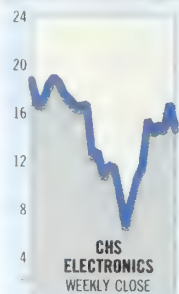


BROOKSTONE
STOCK PRICE
WEEKLY CLOSE

15, '98 DEC. 15
ARS

DATA: BLOOMBERG FINANCIAL MARKETS

FULL RECOVERY STILL TO COME



CHS ELECTRONICS
WEEKLY CLOSE

15, '98 DEC. 15
ARS

DATA: BLOOMBERG FINANCIAL MARKETS

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ON YOUR MARK, GET SET-CRUNCH

How to use the Scoreboard data and give yourself an edge

While stock prices were volatile in 1998—first up, then down, then up again—the profit trend was clearly one way: down. Corporate profits dipped, revenue growth slowed, and margins narrowed. At the beginning of 1998, earnings for the Standard & Poor's 500

stocks were expected to rise 13%. The latest guesstimate is that they'll decline 1.1%.

Where do we go from here? Well, earnings per share for the S&P 500 are expected to increase 17.1% in 1999. But remember, analysts are often far too optimistic early in the year.

INDUSTRY GROUP WINNERS & LOSERS

1998's WINNERS...

| | EARNINGS CHANGE
FROM 1997 |
|------------------------|------------------------------|
| MISCELLANEOUS LEISURE | 708% |
| HEALTH-CARE SERVICES | 338 |
| PAPER | 268 |
| PRINTING & ADVERTISING | 232 |
| INSTRUMENTS | 163 |
| APPAREL | 162 |
| AEROSPACE & DEFENSE | 92 |
| EATING PLACES | 86 |
| APPLIANCES | 79 |
| PAPER CONTAINERS | 75 |

1999's WINNERS...

| | EST. EARNINGS CHANGE
FROM 1998 |
|-------------------------|-----------------------------------|
| AUTO PARTS | 113% |
| MEDICAL PRODUCTS | 97 |
| COMPUTERS & PERIPHERALS | 96 |
| FOREST PRODUCTS | 83 |
| SEMICONDUCTORS | 73 |
| RAILROADS | 68 |
| ENTERTAINMENT | 64 |
| POLLUTION CONTROL | 63 |
| COAL, OIL & GAS | 61 |
| TELECOMMUNICATIONS | 55 |

...AND LAGGARDS

| | EARNINGS CHANGE
FROM 1997 |
|---------------------|------------------------------|
| NONFERROUS METALS | -65% |
| COAL, OIL & GAS | -46 |
| AUTO PARTS | -39 |
| RAILROADS | -33 |
| SEMICONDUCTORS | -24 |
| ENTERTAINMENT | -23 |
| STEEL | -21 |
| ELECTRICAL PRODUCTS | -15 |
| GAS UTILITIES | -14 |
| MEDICAL PRODUCTS | -11 |

...AND LAGGARDS

| | EST. EARNINGS CHANGE
FROM 1998 |
|----------------------|-----------------------------------|
| PETROLEUM SERVICES | -9% |
| STEEL | -4 |
| CONSTRUCTION & ENG. | +2 |
| CHEMICALS | +5 |
| TOBACCO | +5 |
| BUILDING MATERIALS | +7 |
| TIRE & RUBBER | +7 |
| TEXTILES | +9 |
| FINANCIAL SERVICES | +9 |
| ELECTRICAL UTILITIES | +9 |

Because of losses in 1997, earnings gains or losses cannot be calculated on a percentage basis for broadcasters, forest products, and pollution-control companies. Because of estimated losses in 1998 and 1999, earnings gains or losses cannot be calculated on a percentage basis for broadcasters.

DATA: I/B/E/S INTERNATIONAL INC., STANDARD & POOR'S COMPUSTAT

BUSINESS WEEK's Investment look Scoreboard can help you make informed choices in the new year. Standard & Poor's Compustat provided historical data and performance for the 900 companies listed, while I/B/E/S International Inc., a Princeton, N.J., company, supplied the earnings estimates and long-term earnings growth info, based on its survey of 3,757 analysts. To start you off, we provided six tables that slice up data in some familiar and new ways.

Look in the Scoreboard for companies with the largest price increases in 1998, and you'll agree that they were great friends to have in your portfolio. Dell Computer Corp. rose from 21 at the end of 1997 to 60 at the end of November, a 190% increase. Even hotter was Yahoo! Inc., which rocketed from 34 at the end of 1997 to 192 on Nov. 30, up 455%. The valuations for both companies are clearly stratospheric, seemingly undervalued by conventional standards. If past performance is any indicator of the future, they could still gain altitude in 1999.

Tech heavyweight Compaq Computer Corp. shows up on the list of companies expected to post big earnings-per-share gains next year. Compaq's 1998 earnings are projected to be 10% higher, as expenses from its merger with Digital Equipment Corp. ease. In 1999, analysts expect the computer giant to recover to the level of \$1.74 a share, a 278% jump. If that kind of earnings growth could be sustained, it could boost the stock price.

KILLER COMBO. One way to zero in on value stocks is to look for companies with both a low price-earnings ratio and a low price as a percentage of book value. Companies that fit that description are often down on their knees. This year, National Steel Corp. and Case Corp. find themselves on the list of the unloved. An influx of cheap foreign steel into U.S. markets, and the General Motors Corp. strike, took their toll on National Steel, and

month sales were down 9% and month profits dropped 62%. Case, maker of construction and farm equipment, has been hurt by soft overnights for its big-ticket items, nine-month profits down 8%. If national economies recover, and pressures ease on each company, their respective stocks could out of their current doldrums.

of the new factors this year is price-to-sales ratio, or PSR. Companies with a low PSR are a lot like mines with a low p-e; potentially undervalued. But what if you were to

find a stock with both a low PSR and a rising share price? James P. O'Shaughnessy, fund manager and author of *What Works on Wall Street* and *How to Retire Rich*, notes: "Uniting the best growth factor with the best value factor gives you an intriguing play. Why buy just cheap stocks when you could buy cheap stocks already on the mend?" In the Scoreboard, trucking company Landstar System Inc. and discount retailer Ames Department Stores Inc. both seem to fit the bill. Each has a PSR of less than 0.5 (considerably under the overall average of 1.7). Mean-

while, Landstar's stock was up 55% in 1998, while Ames stock rose 36%, meaning that both have been noticed. Investors can only hope the trend will continue.

Remember that the information in the tables and the Scoreboard should be the starting point of your research, not the end of it. But analyze the numbers; while you might invest in a company that has a good story, it's the numbers that will ultimately determine whether that story has a happy ending.

By Frederick F. Jespersen
in New York

A MENU OF INVESTMENT OPPORTUNITIES

you analyze the data by certain criteria, some companies pop out. Be careful, though. Unusually high or low percentages could also be a sign of trouble. This is just a starting point for further research.

LOW P-E RATIO, HIGH EARNINGS GROWTH

Companies with a low p-e ratio, and earnings are forecast to increase smartly

| | PERCENT CHANGE
EARNINGS
1998-99 | P-E RATIO |
|------------------|---------------------------------------|-----------|
| PUCOM SYSTEMS | 8.6 | 62% |
| WEST GROUP | 7.6 | 35 |
| ER ALUMINUM | 9.7 | 33 |
| STAR | 7.8 | 29 |
| TOR GROUP | 11.9 | 45 |
| WOOD HOMES | 12.8 | 59 |
| V CAPITAL | 8.5 | 27 |
| MAN & BROAD HOME | 12.7 | 37 |
| NTA | 0.8 | 20 |
| F LEASING | 6.8 | 20 |

LOW PSR, BIG STOCK-PRICE INCREASE

Companies with both a low price-sales ratio and a jump in stock price in 1998

| | PRICE
CHANGE
DEC. 31, 1997-NOV. 30, 1998 | PRICE-
SALES
RATIO |
|-----------------------|--|--------------------------|
| BINDLEY WESTERN INDS. | 67% | 0.11 |
| BERGEN BRUNSWIG | 48 | 0.18 |
| NVR | 80 | 0.29 |
| MUSICLAND STORES | 132 | 0.33 |
| INGRAM MICRO | 46 | 0.28 |
| MICRO WAREHOUSE | 96 | 0.44 |
| BROWN GROUP | 35 | 0.21 |
| LANDSTAR SYSTEM | 55 | 0.33 |
| AMES DEPT. STORES | 36 | 0.23 |
| SHOPKO STORES | 47 | 0.32 |

CHEAP STOCKS

Companies with both a low price-to-book percentage and a low price-earnings ratio

| | PRICE AS
PERCENT OF
BOOK VALUE | P-E
RATIO |
|---------------------|--------------------------------------|--------------|
| NOVACARE | 33% | 3.7 |
| NATIONAL STEEL | 35 | 2.9 |
| ADVANTA | 49 | 0.8 |
| VENCOR | 35 | 5.2 |
| AGCO | 48 | 3.8 |
| LTV | 32 | 7.9 |
| STANDARD COMMERCIAL | 66 | 4.3 |
| TERRA INDUSTRIES | 51 | 6.9 |
| CASE | 76 | 5.0 |
| ARKANSAS BEST | 70 | 6.1 |

STOCKS WITH BIG PRICE INCREASES

Prices of these companies' stocks jumped the most in 1998

| | PRICE CHANGE
DEC. 31, 1997 - NOV. 30, 1998 |
|----------------|---|
| ON.COM | 537% |
| O! | 455 |
| ICA ONLINE | 287 |
| BUY | 213 |
| COMPUTER | 190 |
| | 164 |
| ON ELECTRONICS | 149 |
| E COMPUTER | 143 |
| CLAND STORES | 132 |
| ND COMMUNS. | 129 |

THE "A" LIST

Companies with a market cap of above \$5 billion and an A- or better S&P Stock Ranking, where return on equity (ROE) and estimated earnings growth are above the average and the p-e to growth rate (PEG) is below the average

| | MARKET
VALUE
BILLIONS | PRICE
CHANGE
12/31/97-
11/30/98 | ROE | PEG | LONG-TERM
EARNINGS
GROWTH | S&P
EQUITY
RANKING |
|---------------|-----------------------------|--|------|-----|---------------------------------|--------------------------|
| MBNA | \$17.1 | 25% | 33.7 | 1.1 | 20.0% | A- |
| INTEL | 179.4 | 53 | 25.7 | 1.4 | 20.0 | A- |
| EQUIFAX | 5.9 | 17 | 47.0 | 1.6 | 17.7 | A- |
| SERVICEMASTER | 6.4 | 10 | 20.3 | 1.9 | 17.3 | A+ |
| CARNIVAL | 20.5 | 25 | 18.8 | 1.5 | 17.1 | A |
| FREDDIE MAC | 41.1 | 44 | 16.1 | 1.8 | 15.0 | A+ |
| NEWELL | 7.2 | 4 | 22.7 | 1.4 | 15.0 | A+ |
| DAYTON HUDSON | 19.8 | 33 | 17.4 | 1.5 | 15.0 | A |
| STATE STREET | 11.0 | 18 | 19.2 | 1.7 | 14.6 | A+ |
| SLM HOLDING | 7.3 | 11 | 78.7 | 1.1 | 14.0 | A |

HIGH HOPES FOR EARNINGS

These companies' earnings are forecast to move ahead strongly in 1999

| | PERCENT CHANGE
1998-99 |
|-----------------------|---------------------------|
| SPORTS AUTHORITY | 611% |
| POLAROID | 530 |
| SAFETY-KLEEN | 524 |
| READER'S DIGEST ASSN. | 381 |
| MEDPARTNERS | 380 |
| NATIONAL FUEL GAS | 284 |
| COMPAQ COMPUTER | 278 |
| U.S. OFFICE PRODUCTS | 273 |
| MOTOROLA | 260 |
| VANSTAR | 258 |

DATA: AS OF NOV. 30, 1998; I/B/E/S INTERNATIONAL INC., STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE MCGRAW-HILL COMPANIES

INVESTMENT OUTLOOK SCOREBOARD

Glossary

MARKET VALUE: Share price on Nov. 30, 1998, multiplied by the latest available common shares outstanding.

RECENT SHARE PRICE: Price for a single share of a company's most widely traded issue of common stock as of the close of trading Nov. 30, 1998.

PRICE CHANGE: Percentage change in the company's most widely traded common-stock issue since Dec. 31, 1997.

EARNINGS GROWTH: Compound annual growth rate, calculated using the 1993 and 1997 restated basic earnings per share (unless noted otherwise).

RETURN ON EQUITY: The latest available net income available for shareholders divided by total equity.

PRICE AS PERCENTAGE OF BOOK VALUE: Share price on Nov. 30, 1998, as a percentage of the latest available book-value per share, which is the sum of common stock at nominal balance-sheet value, capital surplus, and retained earnings as shown in company accounts divided by the number of shares outstanding.

P-E RATIO: Price-earnings ratio based on the latest available 12 months earnings and Nov. 30, 1998, stock price.

PRICE-SALES RATIO: Based on the latest available 12-month sales and the Nov. 30, 1998, stock price.

PRICE-EARNINGS TO GROWTH RATE: The price-earnings ratio based on the 1998 earnings estimate and Nov. 30, 1998, stock price, divided by the long-term earnings growth rate.

DIVIDEND YIELD: Indicated annual dividend as a percent of the Nov. 30, 1998, stock price.

EARNINGS PER SHARE: Diluted earnings-per-share net income (including proceeds from certain convertible securities, warrants, and options that are common stock equivalents, but excluding extraordinary profits or losses) divided by number of common and common equivalent shares.

EARNINGS PER SHARE ESTIMATES: Analysts' consensus estimates for 1998 and 1999 compiled by I/B/E/S International Inc., New York, N.Y.

I/B/E/S is a registered trademark of I/B/E/S International Inc.

VARIATION: The percentage by which the 1999 earnings estimates are above or below the average estimate. The lower this figure, the more analysts agree on their estimates.

LONG-TERM EARNINGS GROWTH RATE: Median estimate by analysts of annual growth rate of earnings, compiled by I/B/E/S International Inc. In most companies, this is for the 3-5 years.

S&P EQUITY RANKING: A measure of a company's historical growth of earnings and dividends, using Standard & Poor's computerized scoring system based on the most recent 10 years of earnings-per-share and dividend

EARNINGS PER SHARE

| COMPANY (FY) | MARKET VALUE (\$ MIL.) | RECENT SHARE PRICE | 1998 PRICE CHANGE % | EARNINGS GROWTH 1993-97 % | RETURN ON EQUITY | PRICE AS % OF BOOK VALUE | P-E RATIO | PRICE-SALES RATIO | P-E TO GROWTH RATE | YIELD % | 1997 ACTUAL | 1999 ESTIMATES FROM ANALYSTS | | | |
|----------------------------------|------------------------|--------------------|---------------------|---------------------------|------------------|--------------------------|-----------|-------------------|--------------------|-------------|-------------|------------------------------|-------------------|-------------|-------------------------|
| | | | | | | | | | | | | I/B/E/S 1998 ANALYST EST | I/B/E/S CONSENSUS | VARIATION % | LONG-TERM GROWTH RATE % |
| ALL-INDUSTRY AVERAGE | 11096.1 | 40 | 4 | 19.1 | 15.1 | 415 | 30 | 1.7 | 1.9 | 1.45 | 1.70 | 1.95 | 2.37 | 10.7 | 13.8 |
| 1 AEROSPACE & DEFENSE | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 9259.9 | 55 | 8 | 24.2 | 25.5 | 565 | 44 | 1.0 | 1.3 | 1.18 | 1.85 | 3.55 | 4.10 | 2.8 | 13.4 |
| BOEING | 39089.1 | 41 | -17 | NM | 1.2 | 301 | 254 | 0.8 | 2.2 | 1.38 | -0.18 | 1.05 | 2.06 | 6.3 | 17.7 |
| CORDANT TECHNOLOGIES (6) | 1466.9 | 40 | -1 | NA | 21.1 | 227 | NA | NA | 0.8 | 1.00 | 2.21 | 3.34* | 3.71 | 3.9 | 15.0 |
| GENERAL DYNAMICS | 7357.8 | 58 | 34 | 3.8 | 16.6 | 347 | 21 | 1.6 | 2.6 | 1.51 | 2.50 | 2.84 | 3.07 | 1.6 | 8.0 |
| GOODRICH (B.F.) | 2820.0 | 38 | -8 | NA | 9.7 | 181 | 19 | 0.7 | 0.8 | 2.90 | 1.53 | 3.03 | 3.53 | 2.3 | 15.0 |
| GULFSTREAM AEROSPACE | 3793.8 | 51 | 76 | NA | 163.7 | 2974 | 19 | 1.7 | 1.2 | 0.00 | 3.12 | 2.97 | 3.75 | 0.3 | 14.0 |
| HOWMET INTERNATIONAL | 1537.6 | 15 | 3 | NM | 23.3 | 434 | 16 | 1.2 | 0.8 | 0.00 | 0.67 | 1.04 | 1.16 | 5.2 | 17.7 |
| LOCKHEED MARTIN | 20231.3 | 104 | 5 | NM | -9.8 | 337 | NA | 0.8 | 1.6 | 1.70 | -3.12 | 6.68 | 7.36 | 1.4 | 10.0 |
| NEWPORT NEWS SHIPBUILDING | 992.4 | 28 | 11 | NA | -13.0 | 477 | NM | 0.6 | 1.7 | 0.57 | -1.39 | 1.83 | 2.00 | 2.0 | 9.0 |
| NORTHROP GRUMMAN | 5591.3 | 51 | -29 | 31.5 | 10.9 | 194 | 18 | 0.6 | 1.2 | 1.97 | 5.98 | 6.68 | 7.66 | 2.7 | 10.0 |
| PRECISION CASTPARTS (3) | 1076.4 | 44 | -27 | 34.9a | 14.8 | 167 | 11 | 0.8 | 0.7 | 0.54 | 3.53 | 4.21 | 4.81 | 3.3 | 15.9 |
| SUNDSTRAND | 1196.4 | 54 | 7 | 25.2 | 43.5 | 584 | 14 | 1.5 | 0.9 | 1.26 | 3.13 | 3.98 | 4.44 | 3.2 | 15.0 |
| UNITED TECHNOLOGIES | 4115.7 | 107 | 47 | 25.7 | 24.4 | 553 | 22 | 0.9 | 1.6 | 1.34 | 4.21 | 4.99 | 5.69 | 1.1 | 13.5 |
| 2 AUTOMOTIVE | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 8709.6 | 36 | -5 | 19.1 | 24.4 | 252 | 15 | 0.5 | 1.1 | 1.65 | 2.92 | 2.34 | 3.56 | 7.4 | 12.0 |
| (A) CARS & TRUCKS | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 29639.9 | 49 | 5 | 33.6 | 44.0 | 262 | 10 | 0.4 | 1.3 | 1.88 | 5.07 | 4.70 | 5.49 | 9.6 | 8.4 |
| FORD MOTOR | 67287.0 | 65 | 13 | 26.2 | 95.7 | 284 | 3 | 0.5 | 1.3 | 3.34 | 5.62 | 5.18 | 5.11 | 3.9 | 8.0 |
| GENERAL MOTORS | 45770.6 | 70 | 15 | 50.0 | 19.5 | 312 | 18 | 0.3 | 2.0 | 2.86 | 8.62 | 4.93 | 8.74 | 7.2 | 7.2 |
| NAVISTAR INTERNATIONAL (10) | 1948.4 | 26 | 4 | NM | 36.5 | 255 | 9 | 0.2 | 0.8 | 0.00 | 1.64 | 3.49 | 3.18 | 17.3 | 9.5 |
| PACCAR | 3553.6 | 46 | -13 | 24.7 | 24.4 | 199 | 8 | 0.5 | 1.0 | 1.32 | 4.41 | 5.22 | 4.94 | 9.9 | 9.0 |
| (B) PARTS & EQUIPMENT | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 1743.1 | 31 | -7 | 17.3 | 18.4 | 256 | 17 | 0.5 | 1.0 | 1.48 | 2.23 | 1.37 | 2.91 | 7.3 | 13.8 |
| ARVIN INDUSTRIES | 985.1 | 42 | 26 | 12.6 | 13.7 | 179 | 14 | 0.4 | 1.1 | 1.91 | 2.78 | 3.20 | 3.51 | 2.0 | 12.0 |
| BORG-WARNER AUTOMOTIVE | 1165.7 | 50 | -4 | NA | 12.4 | 160 | 13 | 0.6 | 0.9 | 1.20 | 4.31 | 4.01 | 4.90 | 2.3 | 13.8 |
| BREED TECHNOLOGIES (6) | 248.7 | 7 | -63 | NM | NM | NM | NM | 0.2 | NM | 4.15 | 0.47 | -10.73* | -0.56 | 33.9 | 17.0 |
| DANA | 6456.1 | 39 | -18 | 26.3 | 16.9 | 226 | 12 | 0.5 | 1.1 | 2.97 | 3.49 | 3.57 | 4.51 | 3.1 | 10.0 |
| DETROIT DIESEL | 511.0 | 21 | -13 | 0.8 | 7.0 | 140 | 20 | 0.2 | 1.5 | 0.00 | 1.21 | 1.61 | 1.66 | 16.9 | 8.5 |
| FEDERAL-MOGUL | 3026.1 | 57 | 40 | NA | 5.4 | 289 | 47 | 0.9 | 1.3 | 0.02 | 1.67 | 2.67 | 4.86 | 2.7 | 16.3 |
| GENCORP (11) | 1021.9 | 54 | -2 | 28.1 | 23.2 | 324 | 14 | 0.6 | 1.1 | 2.44 | 3.36 | 1.87 | 2.35 | 2.6 | 11.5 |

FOOTNOTES: *Actual, not estimated data. NA=not available. NM=not meaningful. NR=not ranked. (a) Four-year compound growth rate. (d) Final year of growth rate calculation is 1998. Data compiled by Standard & Poor's Compustat, a division of The McGraw-Hill Companies, from such sources such as statistical services, registration statements, and company reports that SPC believes to be reliable but are not guaranteed by SPC or BUSINESS WEEK as to correctness or completeness. This material is not an offer to buy or sell any security. Add all data: I/B/E/S International Inc., New York, N.Y. I/B/E/S is a registered trademark of I/B/E/S International Inc.

EARNINGS PER SHARE

| NY (FY) | MARKET
VALUE
(\$ MIL.) | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
ON
EQUITY | PRICE AS
% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1/8/E/S
1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYSTS | | | | S&P
EQUITY
RANKING |
|------------------------------------|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|------------------------------------|------------------------------|---------------------|----------------------------------|----|--------------------------|
| | | | | | | | | | | | | | 1/8/E/S
CON-
SENSUS | VARIA-
TION
% | LONG-TERM
GROWTH
RATE
% | | |
| EMMERZ INTERNATIONAL (1) | 950.7 | 32 | 13 | 14.2 | 29.6 | 522 | 23 | 0.6 | 0.8 | 0.00 | 1.12 | 1.91 | 2.83 | 2.5 | 20.5 | NR | |
| | 2575.5 | 39 | 19 | NM | 15.5 | 197 | 13 | 0.3 | 0.8 | 0.00 | 3.05 | 3.12 | 3.69 | 1.1 | 15.0 | NR | |
| INDUSTRIES (2) | 1012.5 | 17 | -23 | 21.5 | 15.6 | 159 | 11 | 0.4 | 0.7 | 1.19 | 1.66 | 1.67 | 1.81 | 6.6 | 15.0 | B+ | |
| AUTOMOTIVE (9) | 1220.5 | 18 | -16 | NA | 44.4 | 369 | 8 | 0.3 | 0.7 | 2.37 | 1.44 | 2.13* | 2.49 | 6.8 | 12.3 | NR | |
| E & RUBBER
AVERAGE | 5165.0 | 38 | -15 | 2.9 | 15.4 | 208 | 14 | 0.7 | 1.3 | 2.13 | 2.43 | 3.00 | 3.23 | 3.2 | 9.5 | | |
| TIRE & RUBBER | 1482.7 | 20 | -20 | 6.2 | 14.6 | 175 | 12 | 0.8 | 1.3 | 2.15 | 1.55 | 1.55 | 1.71 | 4.1 | 10.0 | A | |
| AR TIRE & RUBBER | 8847.3 | 57 | -11 | -0.3 | 16.1 | 241 | 15 | 0.7 | 1.4 | 2.12 | 3.30 | 4.45 | 4.74 | 2.3 | 9.0 | B+ | |
| RY AVERAGE | 14409.5 | 59 | -1 | 15.1 | 15.5 | 321 | 26 | 3.1 | 1.6 | 2.24 | 2.96 | 3.14 | 3.75 | 3.3 | 11.5 | | |
| NKS - EAST
AVERAGE | 14121.1 | 78 | -2 | 18.2 | 15.8 | 324 | 37 | 2.7 | 1.6 | 2.39 | 4.33 | 4.06 | 5.12 | 5.0 | 11.6 | | |
| ATED BANC-CORP | 2129.2 | 34 | -23 | -13.7 | 14.2 | 241 | NA | 1.6 | 1.4 | 3.40 | 0.82 | 2.43 | 2.62 | 3.8 | 10.0 | A | |
| NEW YORK | 26192.4 | 35 | 20 | 18.9 | 23.4 | 522 | 23 | 6.2 | 1.9 | 1.62 | 1.36 | 1.53 | 1.72 | 2.3 | 12.0 | A- | |
| STON | 12262.6 | 42 | -11 | 28.5 | 17.1 | 260 | 15 | 1.9 | 1.3 | 2.79 | 2.83 | 2.98 | 3.35 | 4.6 | 11.0 | B | |
| S TRUST | 8276.4 | 87 | -23 | -7.5 | 1.4 | 192 | 281 | 0.7 | NM | 4.60 | 7.66 | 0.05 | 6.25 | 24.9 | 10.2 | B+ | |
| MANHATTAN | 53638.1 | 63 | 16 | 14.2 | 14.6 | 242 | 16 | 1.8 | 1.2 | 2.27 | 4.02 | 4.29 | 4.98 | 4.8 | 12.0 | B | |
| FINANCIAL GROUP | 23658.8 | 42 | 11 | 10.3 | 15.3 | 279 | 17 | 2.9 | 1.5 | 2.35 | 2.37 | 2.59 | 2.86 | 1.0 | 11.0 | B+ | |
| NK | 3933.2 | 499 | 7 | 16.7 | 11.9 | 238 | 19 | 3.1 | 1.6 | 0.80 | 25.26 | 27.53 | 31.65 | 7.3 | 11.0 | A+ | |
| | 17056.4 | 23 | 25 | 43.6a | 33.7 | 809 | 25 | 3.7 | 1.1 | 1.06 | 0.77 | 1.02 | 1.23 | 3.4 | 20.0 | A- | |
| BANK | 16500.9 | 63 | 4 | 20.4 | 19.0 | 379 | 20 | 3.6 | 1.6 | 2.28 | 2.88 | 3.24 | 3.61 | 1.1 | 12.0 | B+ | |
| W (J.P.) | 18698.0 | 107 | -5 | 7.5a | 9.6 | 173 | 19 | 1.4 | 2.0 | 3.56 | 7.17 | 5.36 | 6.49 | 11.1 | 10.0 | B+ | |
| FORK BANCORPORATION | 3018.2 | 21 | -6 | 68.4 | 17.1 | 357 | 19 | 4.2 | 1.3 | 2.37 | 1.20 | 1.44 | 1.58 | 1.9 | 11.0 | B | |
| S HERITAGE FINANCIAL GROUP | 1795.1 | 21 | -11 | 29.1 | 12.2 | 248 | 18 | 2.4 | 1.2 | 2.15 | 1.30 | 1.48 | 1.68 | 1.8 | 12.0 | B | |
| NK | 15514.6 | 52 | -9 | 6.5 | 18.7 | 268 | 15 | 2.2 | 1.4 | 3.18 | 3.28 | 3.67 | 3.97 | 1.8 | 10.0 | B+ | |
| IC NEW YORK | 5015.2 | 47 | -18 | 10.7 | 7.6 | 202 | 22 | 1.5 | 2.5 | 2.14 | 3.94 | 2.07 | 4.01 | 7.7 | 9.1 | A- | |
| TREET | 11015.8 | 69 | 18 | 19.6 | 19.2 | 497 | 26 | 3.1 | 1.7 | 0.76 | 2.32 | 2.70 | 3.08 | 1.3 | 14.6 | A+ | |
| F BANCORPORATION | 7232.3 | 42 | -21 | NA | 17.5 | 275 | 16 | 3.0 | 1.6 | 2.87 | 2.09 | 2.65 | 2.88 | 1.4 | 10.0 | B- | |
| NKS - MIDWEST
AVERAGE | 14033.6 | 51 | 1 | 9.9 | 16.9 | 365 | 22 | 3.8 | 1.7 | 2.04 | 2.12 | 2.63 | 3.03 | 2.2 | 11.7 | | |
| NE | 36272.6 | 52 | 4 | -0.1 | 22.1 | 313 | 17 | 3.1 | 1.1 | 2.95 | 1.99 | 3.33 | 3.99 | 2.8 | 13.9 | A | |
| CA | 10029.7 | 65 | 7 | 14.0 | 19.5 | 373 | 18 | 3.4 | 1.4 | 1.98 | 3.19 | 3.71 | 4.15 | 1.4 | 12.0 | A | |
| RCE BANCSHARES | 2682.8 | 44 | 3 | 10.5 | 14.1 | 258 | 19 | 3.1 | 1.8 | 1.31 | 2.13 | 2.40 | 2.66 | 2.1 | 10.0 | A+ | |
| HIRD BANCORP | 17703.8 | 66 | 22 | 15.5 | 13.9 | 569 | 40 | 7.5 | 2.2 | 1.02 | 1.69 | 2.07 | 2.40 | 1.7 | 14.7 | A+ | |
| | 7819.7 | 73 | 28 | 19.2 | 15.3 | 533 | 32 | 7.0 | 1.8 | 1.26 | 2.19 | 2.76 | 3.40 | 3.6 | 15.0 | NR | |
| IGTON BANCSHARES | 6265.0 | 30 | -9 | 2.7 | 16.3 | 282 | 18 | 2.7 | 1.8 | 2.70 | 1.38 | 1.69 | 1.93 | 3.1 | 10.0 | A | |
| IP | 13382.8 | 31 | -13 | 9.8 | 17.7 | 241 | 14 | 2.1 | 1.4 | 3.06 | 2.07 | 2.24 | 2.46 | 2.4 | 10.0 | A+ | |
| ALL & ILSLEY | 5396.5 | 51 | -18 | 10.7 | 13.3 | 255 | 20 | 3.6 | 1.8 | 1.73 | 2.42 | 2.89 | 3.24 | 2.3 | 10.0 | A- | |
| NTILE BANCORPORATION | 6932.2 | 44 | -28 | -1.8 | 11.7 | 227 | 17 | 2.8 | 1.7 | 2.81 | 1.65 | 2.89 | 3.15 | 2.0 | 9.0 | A | |
| AL CITY | 22215.1 | 67 | 2 | NA | 13.6 | 307 | 20 | 3.5 | 1.5 | 2.86 | 3.66 | 3.99 | 4.70 | 2.4 | 11.0 | A- | |
| ERN TRUST | 8988.0 | 81 | 16 | 15.9 | 18.0 | 511 | 27 | 4.0 | 2.2 | 1.04 | 2.66 | 3.04 | 3.45 | 1.4 | 12.0 | A | |
| NT FINANCIAL | 3997.8 | 43 | 14 | 9.3 | 19.6 | 412 | 22 | 3.1 | 2.1 | 1.86 | 1.79 | 2.03 | 2.25 | 2.2 | 10.0 | A+ | |
| NCORP | 27035.9 | 37 | -1 | 5.9 | 21.3 | 455 | 22 | 3.9 | 1.4 | 1.89 | 1.11 | 1.97 | 2.30 | 1.7 | 13.0 | B | |
| FARGO | 27749.1 | 36 | -7 | 17.0 | 19.7 | 380 | 19 | 2.8 | 1.6 | 2.05 | 1.75 | 1.78 | 2.28 | 1.8 | 13.0 | A+ | |
| NKS - SOUTH & SOUTHEAST
AVERAGE | 17925.8 | 47 | 1 | 14.8 | 14.3 | 298 | 21 | 3.1 | 1.6 | 2.31 | 2.30 | 2.68 | 3.08 | 2.5 | 11.5 | | |
| TH BANCORPORATION | 5037.9 | 42 | 17 | 9.5 | 17.8 | 350 | 20 | 3.1 | 1.8 | 1.89 | 1.82 | 2.16 | 2.37 | 2.1 | 11.0 | A | |
| MERICA | 113560.0 | 65 | 7 | 16.6 | 11.6 | 240 | 20 | 3.9 | 1.3 | 2.33 | 4.17 | 3.81 | 5.00 | 5.8 | 13.0 | A- | |
| | 10741.8 | 37 | 15 | 21.9 | 17.0 | 392 | 23 | 3.9 | 1.7 | 1.90 | 1.30 | 1.78 | 1.97 | 1.6 | 12.0 | A- | |
| SS BANCSHARES | 2613.9 | 37 | -15 | 11.2 | 16.5 | 244 | 15 | 2.4 | 1.4 | 2.82 | 2.34 | 2.58 | 2.89 | 2.5 | 10.0 | A+ | |
| IR FINANCIAL | 7476.7 | 66 | 16 | 14.7 | 14.9 | 324 | 22 | 3.7 | 2.0 | 1.99 | 2.77 | 3.09 | 3.47 | 4.3 | 11.0 | B+ | |
| AMERICAN | 4631.8 | 43 | -13 | 13.4a | 11.0 | 290 | 23 | 3.5 | 1.5 | 2.31 | 2.40 | 2.62 | 3.03 | 1.3 | 11.0 | B | |
| TENNESSEE NATIONAL | 4277.8 | 34 | 0 | 17.4 | 22.2 | 434 | 20 | 2.5 | 1.6 | 1.97 | 1.50 | 1.75 | 1.96 | 1.1 | 12.0 | A+ | |
| INION | 60165.2 | 61 | 19 | 9.0 | 14.9 | 346 | 23 | 3.8 | 1.3 | 2.77 | 2.99 | 3.80 | 4.37 | 2.8 | 12.0 | A | |
| IIA | 2634.8 | 17 | -11 | 15.1 | 12.5 | 218 | 15 | 2.5 | 1.3 | 2.49 | 0.98 | 1.12 | 1.24 | 2.5 | 11.5 | B- | |
| AR | 4032.8 | 30 | 20 | 17.4 | 13.4 | 270 | 19 | 2.2 | 1.2 | 1.88 | 1.50 | 1.65 | 1.81 | 1.1 | 15.5 | A | |
| IS FINANCIAL | 8568.1 | 39 | -8 | 32.7 | 14.0 | 290 | 20 | 3.7 | 1.5 | 2.37 | 2.15 | 2.30 | 2.61 | 1.5 | 11.0 | A+ | |
| TRUST | 6072.8 | 37 | 13 | 12.1 | 13.3 | 228 | 17 | 2.2 | 1.5 | 2.07 | 2.03 | 2.25 | 2.52 | 1.2 | 11.0 | A | |
| UST BANKS | 14571.0 | 70 | -2 | 12.1 | 12.3 | 279 | 20 | 3.0 | 1.6 | 1.43 | 3.13 | 3.58 | 3.99 | 2.0 | 12.0 | A+ | |
| PLANTERS | 6462.1 | 48 | -30 | 3.8 | 10.4 | 222 | 25 | 3.0 | 1.8 | 4.20 | 2.45 | 3.26 | 3.94 | 5.3 | 8.0 | B+ | |
| IVIA | 18040.9 | 87 | 8 | NA | 13.6 | 336 | 29 | 3.1 | 1.8 | 2.25 | 2.94 | 4.42 | 4.98 | 2.8 | 11.0 | A- | |
| NKS - WEST & SOUTHWEST
AVERAGE | 3692.7 | 48 | -9 | 22.0 | 14.3 | 246 | 17 | 2.5 | 1.5 | 2.14 | 2.92 | 2.98 | 3.38 | 2.7 | 11.0 | | |
| SECURITY | 3792.4 | 20 | -28 | 13.6 | 15.3 | 246 | 16 | 2.4 | 1.3 | 2.58 | 1.16 | 1.32 | 1.46 | 2.7 | 12.0 | A | |
| CENTURY FINANCIAL | 1719.9 | 21 | -14 | 2.9 | 9.0 | 147 | 16 | 1.4 | 1.8 | 3.18 | 1.72 | 1.46 | 1.82 | 4.4 | 8.0 | A | |
| BANCAL | 5469.3 | 99 | -8 | 51.3a | 15.9 | 204 | 13 | 2.3 | 1.5 | 1.69 | 6.90 | 6.85 | 7.53 | 1.9 | 9.5 | B+ | |
| BANCORPORATION | 3789.2 | 51 | 11 | 20.0a | 16.9 | 388 | 24 | 4.1 | 1.5 | 1.11 | 1.89 | 2.27 | 2.69 | 1.9 | 14.5 | A- | |

EARNINGS PER SHARE

| COMPANY (FY) | MARKET
VALUE
(\$ MIL.) | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
ON
EQUITY | PRICE AS
% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYSTS | | |
|------------------------------------|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|-------------------------|-------------------------------|---------------------|----------------------------------|
| | | | | | | | | | | | | | 1999
E/S
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | |
| AIR PRODUCTS & CHEMICALS (9) | 8823.7 | 38 | 7 | 22.0b | 20.8 | 336 | 15 | 1.8 | 1.3 | 1.78 | 1.91 | 2.48* | 2.42 | 2.1 | 12.0 |
| CABOT (9) | 2041.8 | 30 | 9 | 29.6b | 16.8 | 298 | 19 | 1.2 | 1.1 | 1.46 | 1.19 | 1.61* | 1.92 | 3.9 | 17.5 |
| CROMPTON & KNOWLES | 1450.5 | 20 | 25 | 29.8 | 192.5 | 2511 | 14 | 0.8 | 1.1 | 0.25 | 1.22 | 1.55 | 1.74 | 2.9 | 11.5 |
| CYTEC INDUSTRIES | 976.3 | 23 | -52 | 30.7a | 30.1 | 238 | 9 | 0.7 | 0.6 | 0.00 | 2.39 | 2.56 | 2.60 | 7.7 | 15.0 |
| DOW CHEMICAL | 21553.0 | 97 | -4 | 39.4 | 19.9 | 286 | 15 | 1.1 | 2.0 | 3.57 | 7.70 | 6.09 | 5.19 | 7.3 | 8.0 |
| DUPONT | 66268.5 | 59 | -2 | 49.9 | 10.0 | 607 | 60 | 2.2 | 1.9 | 2.38 | 2.08 | 3.08 | 3.24 | 8.3 | 9.9 |
| EASTMAN CHEMICAL | 4580.5 | 58 | -3 | -3.4a | 14.1 | 232 | 17 | 1.0 | 1.8 | 3.04 | 3.63 | 4.09 | 3.96 | 7.1 | 8.0 |
| FERRO | 994.3 | 28 | 15 | NM | 23.4 | 459 | 17 | 0.7 | 1.4 | 1.93 | -1.08 | 1.66 | 1.86 | 2.2 | 12.0 |
| FULLER (H.B.) (11) | 608.2 | 44 | -12 | 16.5 | 5.8 | 181 | 31 | 0.5 | 1.3 | 1.84 | 2.86 | 2.69 | 3.19 | 5.6 | 12.0 |
| GEON | 519.9 | 22 | -5 | 87.1 | 8.9 | 228 | 26 | 0.4 | 2.9 | 2.25 | 0.95 | 0.86 | 1.67 | 15.6 | 9.0 |
| GRACE (W.R.) | 1212.8 | 17 | NA | NM | 13.7 | 373 | 29 | 0.8 | 1.2 | 3.52 | 1.17 | 1.08 | 1.36 | 4.4 | 12.5 |
| GREAT LAKES CHEMICAL | 2360.6 | 40 | -11 | -9.6 | 3.6 | 215 | 60 | 1.7 | 1.8 | 0.80 | 1.19 | 2.18 | 2.45 | 2.4 | 10.0 |
| HANNA (M.A.) | 697.3 | 14 | 44 | 32.8 | 8.1 | 130 | 15 | 0.3 | 1.5 | 3.41 | 1.40 | 1.04 | 1.16 | 12.9 | 9.0 |
| HERCULES | 3110.1 | 33 | -34 | 18.8 | 33.6 | 450 | 14 | 1.7 | 1.0 | 3.29 | 3.18 | 2.77 | 2.62 | 4.6 | 11.5 |
| IMC GLOBAL | 2615.3 | 23 | -30 | NM | 5.2 | 128 | 28 | 0.8 | 1.2 | 1.40 | 0.93 | 2.21 | 2.60 | 6.9 | 8.6 |
| INTERNATIONAL FLAVORS & FRAGRANCES | 4454.4 | 42 | -19 | 3.0 | 21.3 | 465 | 22 | 3.2 | 2.2 | 3.53 | 1.99 | 1.93 | 2.11 | 4.7 | 10.0 |
| LUBRIZOL | 1498.2 | 27 | -26 | 21.0 | 14.3 | 184 | 13 | 0.9 | 1.6 | 3.83 | 2.66 | 1.69 | 1.93 | 5.7 | 10.0 |
| LYONDELL CHEMICAL | 1432.9 | 19 | -30 | 177.9 | 21.4 | 236 | 11 | 1.3 | 1.4 | 4.83 | 3.58 | 1.78 | 1.39 | 46.0 | 7.5 |
| MILLENNIUM CHEMICALS | 1846.2 | 24 | 2 | NA | 9.1 | 119 | 13 | 1.0 | 2.2 | 2.51 | 2.47 | 1.84 | 1.99 | 16.6 | 6.0 |
| MONSANTO | 27379.1 | 45 | 8 | NA | 7.6 | 584 | 79 | 3.3 | 2.4 | 0.27 | 0.48 | 0.95 | 0.92 | 16.3 | 20.0 |
| MORTON INTERNATIONAL (6) | 3570.8 | 29 | -14 | 17.3 | 13.8 | 247 | 19 | 1.4 | 1.7 | 1.77 | 1.48 | 1.57* | 1.71 | 3.5 | 11.0 |
| NALCO CHEMICAL | 2190.0 | 33 | -15 | NA | 22.1 | 337 | 16 | 1.4 | 1.5 | 2.99 | 2.10 | 2.29 | 2.44 | 3.6 | 10.0 |
| OLIN | 1439.6 | 31 | 35 | NM | 12.6 | 173 | 14 | 0.6 | 1.7 | 3.93 | 3.00 | 2.46 | 2.50 | 16.4 | 7.5 |
| PRAXAIR | 6024.5 | 38 | -15 | 25.2 | 17.9 | 267 | 15 | 1.2 | 1.0 | 1.31 | 2.53 | 2.60 | 2.80 | 2.9 | 14.0 |
| ROHM & HAAS | 5803.3 | 35 | 10 | 39.1 | 31.3 | 417 | 14 | 1.5 | 1.6 | 2.06 | 2.13 | 2.19 | 2.32 | 6.5 | 10.0 |
| SOLUTIA | 2571.6 | 22 | -16 | NA | NM | NM | 14 | 0.9 | 1.1 | 0.18 | 1.55 | 2.00 | 2.16 | 4.6 | 10.0 |
| TERRA INDUSTRIES | 407.3 | 5 | -58 | 71.3 | 7.4 | 51 | 7 | 0.2 | NM | 3.68 | 2.80 | -0.10 | 0.11 | 290.9 | 5.0 |
| UNION CARBIDE | 5940.9 | 45 | 4 | 48.6 | 20.4 | 250 | 13 | 1.0 | 1.8 | 2.01 | 4.53 | 2.78 | 2.57 | 17.1 | 9.0 |
| USEC (6) | 1356.3 | 14 | NA | NA | 6.2 | 119 | 9 | 1.1 | 1.3 | 8.11 | 2.50 | 1.46* | 1.20 | 0.8 | 7.0 |
| WITCO | 1098.1 | 19 | -53 | 26.3 | 10.2 | 166 | 16 | 0.5 | 1.7 | 5.88 | 1.55 | 1.03 | 1.21 | 7.4 | 11.0 |
| CONGLOMERATES | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | |
| ALLEGHENY TELEDYNE | 4053.6 | 21 | -21 | 19.6 | 18.7 | 303 | 16 | 1.0 | 1.2 | 3.11 | 1.67 | 1.41 | 1.69 | 10.1 | 12.2 |
| ALLIEDSIGNAL | 24642.2 | 44 | 13 | 15.6 | 25.7 | 490 | 19 | 1.6 | 1.3 | 1.36 | 2.02 | 2.33 | 2.65 | 1.5 | 15.0 |
| ANIXTER INTERNATIONAL | 704.6 | 17 | 0 | 21.9 | 14.6 | 168 | 13 | 0.2 | 0.8 | 0.00 | 0.95 | 1.11 | 1.38 | 4.3 | 18.8 |
| EG&G | 1247.9 | 28 | 34 | -8.8 | 27.1 | 331 | 13 | 0.9 | 2.4 | 2.00 | 0.67 | 1.31 | 1.56 | 4.5 | 9.0 |
| GENERAL ELECTRIC | 295319.7 | 90 | 23 | 19.6 | 24.1 | 795 | 33 | 3.1 | 2.5 | 1.33 | 2.46 | 2.80 | 3.19 | 0.6 | 13.0 |
| HARCOURT GENERAL (10) | 3674.7 | 52 | -5 | NM | 9.8 | 417 | 43 | 0.9 | 1.4 | 1.55 | -1.64 | 1.90 | 2.49 | 2.8 | 20.0 |
| IKON OFFICE SOLUTIONS (9) | 1321.4 | 10 | -65 | NM | -6.9 | 110 | NM | 0.2 | NM | 1.64 | 0.77 | -0.76* | 0.65 | 16.9 | 16.0 |
| ODGEN | 1307.4 | 27 | -6 | 1.4 | 15.8 | 238 | 16 | 0.8 | 1.2 | 4.71 | 1.49 | 1.70 | 1.97 | 2.6 | 13.5 |
| PITTSWAY | 1184.3 | 28 | -20 | 27.0 | 8.8 | 254 | 29 | 0.9 | 1.1 | 0.43 | 1.31 | 1.45 | 1.68 | 1.8 | 18.0 |
| PREMARK INTERNATIONAL | 2067.4 | 34 | 16 | 20.6 | 11.9 | 213 | 19 | 0.8 | 1.3 | 1.19 | 1.59 | 2.05 | 2.37 | 1.3 | 13.0 |
| TENNECO | 6180.5 | 36 | -10 | 29.2 | 14.7 | 232 | 15 | 0.8 | 1.2 | 3.37 | 2.11 | 2.31 | 2.64 | 5.3 | 12.8 |
| TEXTRON | 12412.1 | 78 | 24 | 18.9 | 14.4 | 379 | 27 | 1.3 | 2.2 | 1.47 | 3.29 | 2.68 | 3.97 | 1.0 | 13.0 |
| TRW | 6593.9 | 55 | 3 | NA | -2.8 | 406 | NM | 0.6 | 1.4 | 2.40 | -0.40 | 3.90 | 4.38 | 3.2 | 10.0 |
| U.S. INDUSTRIES (9) | 1722.8 | 18 | -42 | NA | 0.7 | 182 | 250 | 0.5 | 18.5 | 1.14 | 1.43 | 0.07* | 1.71 | 1.2 | 13.5 |
| VIAD | 2316.6 | 23 | 21 | 30.1 | 21.8 | 368 | 16 | 0.9 | 1.1 | 1.37 | 1.03 | 1.24 | 1.45 | 2.8 | 17.5 |
| WHITMAN | 2280.6 | 23 | 13 | -13.1 | 11.5 | 738 | 65 | 1.4 | 2.5 | 0.88 | 0.15 | 0.62 | 0.72 | 2.8 | 14.6 |
| CONSUMER PRODUCTS | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | |
| (A) APPAREL | 15812.9 | 40 | 3 | 15.2 | 19.9 | 593 | 30 | 1.5 | 1.8 | 1.54 | 1.38 | 2.00 | 2.32 | 5.0 | 14.0 |
| GROUP AVERAGE | 2275.3 | 24 | -17 | 5.2 | 6.0 | 212 | 33 | 0.7 | 1.0 | 1.12 | 0.67 | 1.76 | 2.09 | 5.2 | 14.2 |
| BROWN GROUP (1) | 324.2 | 18 | 35 | NM | 3.9 | 151 | 39 | 0.2 | 1.4 | 2.23 | -1.19 | 1.27 | 1.55 | 13.5 | 10.0 |
| FRUIT OF THE LOOM | 1063.5 | 15 | -42 | NM | -44.8 | 185 | NM | 0.5 | 0.5 | 0.00 | -5.18 | 2.26 | 2.68 | 7.5 | 13.0 |
| JONES APPAREL GROUP | 2317.1 | 23 | 8 | 25.4 | 29.3 | 463 | 17 | 1.5 | 0.8 | 0.00 | 1.13 | 1.43 | 1.78 | 2.8 | 20.0 |
| KELLWOOD (4) | 583.6 | 27 | -10 | 4.0 | 10.9 | 144 | 13 | 0.3 | 0.7 | 2.22 | 1.95 | 2.29 | 2.91 | 4.8 | 16.5 |
| LIZ CLAIBORNE | 2189.0 | 34 | -19 | 14.5 | 18.4 | 224 | 12 | 0.9 | 0.8 | 1.33 | 2.63 | 2.84 | 3.05 | 3.3 | 15.0 |
| NIKE (5) | 11452.0 | 40 | 2 | 8.4 | 9.3 | 342 | 38 | 1.2 | 1.7 | 1.20 | 1.35 | 1.59 | 1.99 | 10.1 | 15.0 |
| NINE WEST GROUP (1) | 449.2 | 13 | -52 | 5.6a | 13.0 | 96 | 8 | 0.2 | 0.6 | 0.00 | 2.15 | 1.37 | 1.85 | 6.5 | 15.0 |
| PHILLIPS-VAN HEUSEN (1) | 190.4 | 7 | -51 | NM | -14.2 | 89 | NM | 0.1 | 0.8 | 2.14 | -2.46 | 0.71 | 0.81 | 2.5 | 12.0 |
| POLO RALPH LAUREN (3) | 1856.4 | 19 | -23 | NA | 20.4 | 290 | 14 | 1.2 | 0.9 | 0.00 | 1.47 | 1.25 | 1.44 | 0.7 | 16.0 |
| REEBOK INTERNATIONAL | 899.6 | 16 | -45 | -1.7 | 6.0 | 171 | 28 | 0.3 | 1.3 | 0.00 | 2.32 | 1.05 | 1.34 | 9.3 | 11.5 |
| RUSSELL | 860.6 | 24 | -10 | NA | 0.9 | 135 | 149 | 0.7 | 1.3 | 2.35 | 1.47 | 1.57 | 1.81 | 3.4 | 12.0 |
| VF | 5917.3 | 49 | 6 | 9.8 | 18.1 | 293 | 16 | 1.1 | 1.6 | 1.62 | 2.70 | 3.04 | 3.31 | 1.5 | 10.0 |
| WARNACO GROUP | 1475.9 | 25 | 21 | -24.3 | 6.1 | 179 | 32 | 0.8 | 0.6 | 1.46 | 0.42 | 2.27 | 2.65 | 1.9 | 18.0 |

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% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1/8/E/S
1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYSTS | | |
|-------------------------------------|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|------------------------------------|------------------------------|---------------------|----------------------------------|
| | | | | | | | | | | | | | 1/8/E/S
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% |
| (B) APPLIANCES & HOME FURNISHINGS | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 3272.4 | 41 | 26 | 25.6 | 16.7 | 374 | 22 | 0.7 | 1.2 | 1.38 | 1.37 | 2.45 | 2.88 | 5.2 | 14.7 |
| ARMSTRONG WORLD INDUSTRIES | 2666.8 | 67 | -11 | 47.9 | 22.8 | 288 | 13 | 1.1 | 1.3 | 2.88 | 4.50 | 5.32 | 5.85 | 2.9 | 10.0 |
| BEST BUY (2) | 5806.9 | 58 | 213 | NA | 17.4 | 671 | NA | 0.6 | 1.4 | 0.00 | 1.04 | 1.89 | 2.33 | 3.9 | 21.5 |
| CIRCUIT CITY GROUP (2) | 3630.9 | 36 | 2 | NA | 6.8 | 212 | 31 | 0.4 | 1.6 | 0.39 | 1.13 | 1.33 | 2.14 | 11.2 | 17.0 |
| FURNITURE BRANDS INTERNATIONAL | 1329.3 | 25 | 24 | NA | 23.1 | 333 | 15 | 0.7 | 0.9 | 0.00 | 1.15 | 1.66 | 1.94 | 4.1 | 16.8 |
| HARMAN INTERNATIONAL INDUSTRIES (6) | 755.4 | 43 | 0 | 11.4 | 10.6 | 149 | 15 | 0.5 | 1.0 | 0.47 | 2.90 | 2.86* | 3.66 | 6.6 | 15.0 |
| HEILIG-MEYERS (2) | 413.5 | 7 | -42 | NM | -9.5 | 67 | NM | 0.2 | 0.6 | 4.00 | -0.98 | 0.75 | 0.98 | 11.2 | 15.0 |
| LEGGETT & PLATT | 4465.6 | 23 | 8 | 19.6 | 17.4 | 321 | 19 | 1.4 | 1.2 | 1.41 | 1.08 | 1.25 | 1.42 | 1.4 | 15.0 |
| MAYTAG | 4886.5 | 54 | 45 | 41.1 | 52.6 | 954 | 19 | 1.2 | 1.6 | 1.33 | 1.87 | 3.00 | 3.37 | 2.7 | 11.5 |
| TANDY | 4511.2 | 45 | 17 | 7.8 | 11.2 | 532 | 47 | 0.9 | 1.3 | 0.89 | 1.63 | 2.31 | 2.68 | 2.2 | 15.0 |
| WHIRLPOOL | 4258.4 | 56 | 2 | NM | 14.2 | 218 | 15 | 0.4 | 1.4 | 2.43 | -0.62 | 4.08 | 4.47 | 5.4 | 10.0 |
| (C) BEVERAGES | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 39868.1 | 54 | 18 | 16.0 | 23.2 | 782 | 39 | 2.8 | 2.9 | 1.03 | 1.83 | 1.96 | 2.17 | 2.2 | 13.7 |
| ANHEUSER-BUSCH | 28973.8 | 61 | 38 | 18.8 | 28.4 | 680 | 24 | 2.6 | 2.7 | 1.85 | 2.36 | 2.51 | 2.74 | 1.1 | 9.0 |
| BROWN-FORMAN (4) | 4996.9 | 73 | 32 | 7.0 | 23.6 | 618 | 26 | 2.9 | 2.5 | 1.54 | 2.67 | 2.93 | 3.22 | 2.2 | 10.0 |
| CANANDAIGUA BRANDS (2) | 896.5 | 50 | -10 | 19.4a | 13.9 | 219 | 17 | 0.7 | 1.2 | 0.00 | 2.62 | 3.19 | 3.63 | 0.6 | 12.5 |
| COCA-COLA | 172512.1 | 70 | 5 | 18.7 | 47.7 | 2195 | 46 | 9.1 | 3.1 | 0.86 | 1.64 | 1.46 | 1.60 | 1.3 | 15.5 |
| COCA-COLA ENTERPRISES | 12778.6 | 38 | 7 | NM | 7.2 | 605 | 102 | 1.0 | 5.8 | 0.42 | 0.43 | 0.26 | 0.30 | 3.3 | 25.0 |
| COORS (ADOLPH) | 1814.8 | 50 | 50 | NM | 8.4 | 237 | 29 | 1.0 | 2.7 | 1.21 | 2.16 | 2.06 | 2.27 | 3.5 | 9.0 |
| PEPSICO | 57103.5 | 39 | 7 | NA | 33.4 | 919 | 28 | 2.7 | 2.0 | 1.34 | 0.95 | 1.28 | 1.43 | 3.6 | 15.0 |
| (D) PERSONAL CARE | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 23245.3 | 55 | 11 | 15.8 | 36.7 | 1370 | 33 | 2.5 | 3.2 | 1.05 | 1.53 | 1.64 | 2.02 | 2.5 | 14.4 |
| ALBERTO-CULVER (9) | 1412.4 | 26 | -20 | 19.9b | 15.6 | 264 | 19 | 0.8 | 1.7 | 0.94 | 1.41 | 1.37* | 1.55 | 1.4 | 11.0 |
| AVON PRODUCTS | 10672.4 | 41 | 32 | 11.8 | 125.5 | 5239 | 42 | 2.1 | 1.7 | 1.67 | 1.27 | 1.47 | 1.69 | 1.8 | 16.0 |
| CLOROX (6) | 11497.7 | 111 | 40 | 14.4 | 28.1 | 1044 | 38 | 4.1 | 3.0 | 1.30 | 2.37 | 2.82* | 3.19 | 1.6 | 13.0 |
| COLGATE-PALMOLIVE | 25071.7 | 86 | 16 | 9.6 | 38.5 | 1220 | 34 | 2.8 | 2.2 | 1.29 | 2.27 | 2.78 | 3.17 | 2.4 | 14.0 |
| DIAL | 2703.0 | 26 | 26 | NA | 25.7 | 711 | 27 | 1.9 | 1.7 | 1.22 | 0.89 | 1.02 | 1.17 | 1.7 | 15.0 |
| ECOLAB | 4005.4 | 31 | 12 | 13.8 | 22.8 | 611 | 28 | 2.2 | 1.9 | 1.23 | 1.00 | 1.18 | 1.34 | 0.7 | 13.5 |
| ESTEE LAUDER (6) | 8892.6 | 75 | 46 | NA | 19.8 | 1162 | 40 | 2.4 | 2.5 | 0.45 | 1.47 | 1.78* | 2.06 | 1.0 | 17.0 |
| GILLETTE | 50959.3 | 46 | -9 | 25.7 | 23.0 | 1103 | 47 | 5.1 | 2.2 | 1.11 | 1.25 | 1.29 | 1.50 | 4.1 | 16.4 |
| PROCTER & GAMBLE (6) | 116182.0 | 88 | 10 | 15.5 | 31.1 | 978 | 33 | 3.1 | 2.6 | 1.30 | 2.28 | 2.56* | 2.92 | 0.7 | 13.0 |
| REVLON | 1056.7 | 21 | -42 | NM | NM | NM | 21 | 0.5 | 12.3 | 0.00 | 1.14 | 0.11 | 1.59 | 9.6 | 15.0 |
| (E) TOBACCO | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 25593.6 | 28 | -23 | 35.2 | 26.5 | 398 | 16 | 1.3 | 1.0 | 4.17 | 2.11 | 2.43 | 2.56 | 12.0 | 12.5 |
| DIMON (6) | 364.6 | 8 | -69 | NM | 2.9 | 85 | 30 | 0.2 | 0.6 | 4.40 | 1.67 | 0.94* | 1.01 | 48.5 | 15.0 |
| PHILIP MORRIS | 136114.7 | 56 | 24 | NA | 37.1 | 790 | 21 | 2.4 | 1.3 | 3.15 | 2.58 | 3.17 | 3.51 | 1.7 | 14.0 |
| RJR NABISCO HOLDINGS | 9359.1 | 29 | -23 | NM | -2.3 | 109 | NM | 0.5 | 1.5 | 7.12 | 1.09 | 2.15 | 2.30 | 3.5 | 9.0 |
| STANDARD COMMERCIAL (3) | 104.2 | 8 | -51 | NA | 17.1 | 66 | 4 | 0.1 | 0.3 | 2.46 | 2.05 | 1.82 | 2.03 | 15.8 | 15.0 |
| UNIVERSAL (6) | 1192.0 | 35 | -14 | 35.2 | 25.5 | 224 | 9 | 0.3 | 0.7 | 3.18 | 2.87 | 3.99* | 3.82 | 1.0 | 13.0 |
| UST | 6427.4 | 35 | -6 | NA | 79.0 | 1114 | 14 | 4.6 | 1.5 | 4.69 | 2.37 | 2.50 | 2.69 | 1.5 | 9.0 |
| 7 CONTAINERS & PACKAGING | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 2597.1 | 34 | -7 | -3.1 | 11.1 | 264 | 30 | 0.8 | 2.2 | 1.53 | 1.36 | 1.84 | 2.06 | 41.7 | 12.0 |
| (A) GLASS, METAL & PLASTIC | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2742.1 | 34 | -11 | 1.1 | 8.7 | 193 | 19 | 0.6 | 1.3 | 1.09 | 2.08 | 2.27 | 2.60 | 6.0 | 12.1 |
| BALL | 1316.8 | 43 | 21 | NM | 8.2 | 206 | 25 | 0.5 | 2.0 | 1.40 | 1.74 | 2.12 | 2.60 | 9.6 | 10.0 |
| CROWN CORK & SEAL | 4135.6 | 34 | -33 | 1.1 | 5.4 | 144 | 25 | 0.5 | 1.2 | 2.96 | 2.15 | 2.33 | 2.57 | 4.7 | 12.0 |
| OWENS-ILLINOIS | 4990.8 | 32 | -15 | NM | 12.7 | 228 | 14 | 1.0 | 1.1 | 0.00 | 2.01 | 2.22 | 2.48 | 4.8 | 13.5 |
| SILGAN HOLDINGS | 525.3 | 28 | -15 | NM | NM | NM | 13 | 0.3 | 0.9 | 0.00 | 2.40 | 2.41 | 2.73 | 4.8 | 13.0 |
| (B) PAPER | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2500.5 | 33 | -5 | -4.5 | 12.5 | 307 | 37 | 0.9 | 2.7 | 1.83 | 0.89 | 1.55 | 1.71 | 65.5 | 11.8 |
| AVERY DENNISON | 4865.8 | 48 | 7 | 28.9 | 25.8 | 565 | 23 | 1.4 | 1.6 | 2.00 | 1.93 | 2.19 | 2.39 | 1.3 | 13.5 |
| BEMIS | 1982.5 | 38 | -14 | NA | 17.4 | 303 | 18 | 1.1 | 1.3 | 2.33 | 2.00 | 2.12 | 2.35 | 3.4 | 13.5 |
| ROCK-TENN (9) | 567.2 | 16 | -20 | -15.5b | 10.6 | 143 | 14 | 0.4 | 0.9 | 1.84 | 0.47 | 1.20* | 1.34 | 3.0 | 15.0 |
| SMURFIT-STONE CONTAINER | 1561.0 | 14 | 0 | NM | NM | NM | 45 | 0.5 | 7.4 | 0.00 | 0.01 | 0.21 | 0.19 | 347.4 | 9.0 |
| SONOCO PRODUCTS | 3041.3 | 30 | -5 | NM | 4.2 | 378 | 92 | 1.1 | 1.5 | 2.41 | 0.00 | 1.72 | 1.87 | 5.3 | 12.0 |
| TEMPLE-INLAND | 2985.0 | 54 | 3 | -27.1a | 4.7 | 146 | 32 | 0.8 | 3.6 | 2.38 | 0.90 | 1.87 | 2.10 | 32.4 | 8.0 |
| 8 DISCOUNT & FASHION RETAILING | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 9343.8 | 33 | 18 | 18.4 | 13.4 | 466 | 30 | 1.6 | 1.4 | 0.38 | 1.17 | 1.44 | 1.72 | 6.4 | 18.2 |
| AMAZON.COM | 10123.4 | 192 | 537 | NA | -47.3 | 5631 | NM | 23.9 | NM | 0.00 | -0.64 | -1.61 | -1.71 | 7.0 | 75.0 |
| AMES DEPARTMENT STORES (1) | 548.9 | 24 | 36 | 35.6 | 21.4 | 280 | 14 | 0.2 | 0.9 | 0.00 | 1.46 | 1.81 | 2.04 | 2.0 | 15.0 |
| AUTOZONE (8) | 4581.6 | 30 | 4 | 21.4b | 18.6 | 352 | 20 | 1.4 | 1.1 | 0.00 | 1.28 | 1.48* | 1.72 | 0.6 | 18.0 |
| BARNES & NOBLE (1) | 2273.0 | 33 | -1 | 33.7 | 10.5 | 426 | 42 | 0.8 | 1.4 | 0.00 | 0.93 | 0.94 | 1.41 | 6.4 | 24.5 |
| BJ'S WHOLESALE CLUB (1) | 1454.0 | 39 | 23 | NA | 16.7 | 322 | 19 | 0.4 | 1.3 | 0.00 | 1.81 | 2.10 | 2.45 | 1.6 | 14.0 |
| BORDERS GROUP (1) | 1869.0 | 24 | -23 | 61.9a | 13.5 | 299 | 24 | 0.7 | 0.8 | 0.00 | 0.98 | 1.22 | 1.51 | 1.3 | 25.0 |
| BRYLANE (1) | 214.3 | 16 | -68 | NA | 18.7 | 121 | 7 | 0.2 | 0.6 | 0.00 | 2.67 | 1.41 | 1.69 | 3.6 | 18.0 |
| CDW COMPUTER CENTERS | 1741.3 | 81 | 55 | 57.2a | 24.6 | 696 | 29 | 1.1 | 1.1 | 0.00 | 2.35 | 3.03 | 3.71 | 1.1 | 25.0 |
| CONSOLIDATED STORES (1) | 2352.8 | 22 | 51 | 1.0 | 5.5 | 219 | 33 | 0.6 | 0.8 | 0.00 | 0.77 | 1.31 | 1.76 | 9.7 | 20.0 |

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EQUITY | PRICE AS
% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1999 ESTIMATES FROM ANALYSTS | | | | | LONG-TERM
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ATION
% | | | | |
| CORPORATE EXPRESS (1) | 628.4 | 6 | -54 | NA | NA | 109 | 13 | 0.2 | 0.9 | 0.00 | 0.32 | 0.39 | 0.51 | 5.9 | 17.5 | | | |
| COSTCO (8) | 13653.7 | 63 | 41 | 12.4b | 16.3 | 460 | 31 | 0.6 | 2.1 | 0.00 | 1.47 | 2.03* | 2.35 | 2.2 | 15.0 | | | |
| DAYTON HUDSON (1) | 19836.0 | 45 | 33 | 21.3 | 17.4 | 406 | 24 | 0.7 | 1.5 | 0.80 | 1.70 | 1.95 | 2.23 | 1.3 | 15.0 | | | |
| DILLARD'S (1) | 3671.8 | 34 | -2 | 2.0 | 9.5 | 130 | 14 | 0.5 | 1.2 | 0.47 | 2.31 | 2.59 | 2.93 | 3.8 | 11.0 | | | |
| DOLLAR GENERAL (1) | 5022.0 | 24 | 3 | NA | 25.3 | 771 | 30 | 1.6 | 1.2 | 0.54 | 0.67 | 0.83 | 1.03 | 1.9 | 23.0 | | | |
| FAMILY DOLLAR STORES (8) | 3454.9 | 20 | 37 | 3.1b | 18.3 | 598 | 33 | 1.5 | 1.7 | 0.90 | 0.44 | 0.60* | 0.73 | 2.7 | 20.0 | | | |
| FEDERATED DEPARTMENT STORES (1) | 8542.5 | 42 | -3 | 15.1 | 12.4 | 161 | 14 | 0.5 | 0.9 | 0.00 | 2.58 | 3.17 | 3.58 | 1.2 | 15.0 | | | |
| FINGERHUT | 548.4 | 11 | -48 | -2.2 | 4.6 | 107 | 24 | 0.3 | 0.7 | 1.44 | 1.40 | 0.88 | 1.06 | 2.8 | 17.0 | | | |
| FOOTSTAR | 597.4 | 24 | -9 | NA | 18.2 | 179 | 10 | 0.3 | 0.7 | 0.00 | 1.99 | 2.62 | 2.94 | 1.0 | 13.0 | | | |
| GAP (1) | 28634.9 | 49 | 108 | NA | 57.8 | 2280 | 41 | 3.5 | 2.1 | 0.27 | 0.87 | 1.29 | 1.54 | 1.7 | 18.0 | | | |
| GLOBAL DIRECTMAIL | 709.0 | 20 | 13 | NA | 15.6 | 257 | 17 | 0.5 | 1.2 | 0.00 | 1.02 | 1.06 | 1.20 | 7.5 | 15.0 | | | |
| HOME DEPOT (1) | 73147.5 | 50 | 69 | NA | 18.1 | 880 | 50 | 2.5 | 2.0 | 0.24 | 0.78 | 1.05 | 1.28 | 1.6 | 24.0 | | | |
| HOMEBASE (1) | 217.8 | 6 | -27 | NM | 4.7 | 57 | 15 | 0.1 | 0.8 | 0.00 | -0.02 | 0.54 | 0.60 | 5.0 | 13.0 | | | |
| INTIMATE BRANDS (1) | 7184.1 | 29 | 20 | 16.0 | 55.2 | 1264 | 23 | 1.9 | 1.2 | 1.94 | 1.14 | 1.54 | 1.78 | 1.1 | 16.0 | | | |
| KMART (1) | 7521.8 | 15 | 33 | NM | 6.2 | 133 | 22 | 0.2 | 1.5 | 0.00 | 0.51 | 0.99 | 1.20 | 6.7 | 10.0 | | | |
| KOHL'S (1) | 7774.4 | 49 | 44 | 25.1 | 16.2 | 736 | 46 | 2.2 | 1.9 | 0.00 | 0.91 | 1.15 | 1.39 | 1.4 | 22.5 | | | |
| LANDS' END (1) | 684.2 | 23 | 35 | 14.2 | 20.7 | 302 | 15 | 0.5 | 1.5 | 0.00 | 2.00 | 1.30 | 1.81 | 15.5 | 12.0 | | | |
| LIBERTY MEDIA GROUP | 15414.0 | 40 | 67 | NA | 4.1 | 374 | 103 | 24.5 | 5.9 | 0.00 | 0.31 | 0.63 | 0.28 | 50.0 | 10.8 | | | |
| LIMITED (1) | 6594.1 | 29 | 13 | -7.4 | 80.3 | 330 | 4 | 0.7 | 1.5 | 1.80 | 0.79 | 1.46 | 1.69 | 1.8 | 13.0 | | | |
| LOWE'S (1) | 14900.7 | 42 | 77 | 23.2 | 14.8 | 492 | 33 | 1.3 | 1.6 | 0.28 | 1.03 | 1.32 | 1.57 | 1.9 | 20.0 | | | |
| MAY DEPARTMENT STORES (1) | 13975.9 | 60 | 14 | 9.3 | 20.3 | 358 | 18 | 1.1 | 1.6 | 2.11 | 3.11 | 3.44 | 3.80 | 1.1 | 11.0 | | | |
| MICHAELS STORES (1) | 533.9 | 18 | -38 | NA | 8.6 | 119 | 15 | 0.3 | 0.5 | 0.00 | 1.05 | 1.39 | 1.78 | 2.8 | 25.0 | | | |
| MICRO WAREHOUSE | 956.0 | 27 | 96 | NM | -7.6 | 255 | NM | 0.4 | 1.1 | 0.00 | -1.06 | 1.24 | 1.39 | 5.8 | 20.0 | | | |
| NEIMAN MARCUS GROUP (7) | 1328.0 | 27 | -12 | NA | 15.0 | 202 | 13 | 0.6 | 0.8 | 0.00 | 1.32 | 2.13* | 2.21 | 9.5 | 15.0 | | | |
| NORDSTROM (1) | 5487.1 | 37 | 23 | 8.8 | 14.4 | 397 | 28 | 1.1 | 1.8 | 0.86 | 1.20 | 1.41 | 1.62 | 2.5 | 14.5 | | | |
| OFFICE DEPOT | 7992.3 | 33 | 36 | 19.2 | 10.9 | 411 | 31 | 0.9 | 1.3 | 0.00 | 0.97 | 1.23 | 1.51 | 0.7 | 20.0 | | | |
| OFFICEMAX (1) | 1325.1 | 11 | 25 | 64.4 | 8.0 | 112 | 14 | 0.3 | 0.6 | 0.00 | 0.72 | 0.80 | 0.95 | 3.2 | 22.5 | | | |
| PAYLESS SHOESOURCE (1) | 1710.0 | 49 | -27 | 0.9a | 17.9 | 221 | 13 | 0.7 | 0.9 | 0.00 | 3.31 | 3.79 | 4.37 | 0.9 | 15.0 | | | |
| PENNEY (J.C.) (1) | 13968.3 | 55 | -9 | NA | 7.8 | 203 | 24 | 0.4 | 1.6 | 3.96 | 2.10 | 3.04 | 3.57 | 4.2 | 11.0 | | | |
| PEP BOYS-MANNY, MOE & JACK (1) | 869.6 | 14 | -41 | -15.7a | -0.5 | 103 | NM | 0.4 | 1.3 | 1.84 | 0.80 | 0.77 | 1.05 | 5.7 | 14.5 | | | |
| PETSMART (1) | 994.4 | 9 | 18 | NM | 2.4 | 290 | 107 | 0.5 | 1.9 | 0.00 | -0.28 | 0.19 | 0.39 | 5.1 | 23.3 | | | |
| ROSS STORES (1) | 1716.9 | 36 | 0 | 43.2 | 34.8 | 464 | 14 | 0.8 | 0.9 | 0.61 | 2.35 | 2.76 | 3.14 | 0.6 | 14.5 | | | |
| SAKS (1) | 2496.5 | 28 | -3 | NM | -1.9 | 133 | NM | 0.6 | 0.8 | 0.00 | 0.81 | 1.65 | 2.20 | 1.4 | 20.0 | | | |
| SCHEIN (HENRY) | 1409.2 | 36 | 1 | NM | 2.2 | 308 | 169 | 0.8 | 1.0 | 0.00 | -0.03 | 1.43 | 1.90 | 1.1 | 24.0 | | | |
| SEARS, ROEBUCK | 18173.4 | 47 | 5 | NA | 18.9 | 320 | 18 | 0.4 | 1.1 | 1.94 | 2.99 | 3.45 | 3.90 | 3.1 | 12.8 | | | |
| SHOPKO STORES (1) | 841.4 | 32 | 47 | NA | NA | 201 | 32 | 0.3 | 1.2 | 0.00 | 1.71 | 2.26 | 2.53 | 0.4 | 12.0 | | | |
| SPIEGEL | 518.7 | 4 | -20 | NM | 0.4 | 86 | NM | 0.2 | 1.7 | 0.00 | -0.28 | 0.14 | 0.21 | 57.1 | 16.5 | | | |
| SPORTS AUTHORITY (1) | 206.4 | 7 | -56 | 14.3 | -21.0 | 76 | NM | 0.1 | 4.8 | 0.00 | 0.70 | 0.09 | 0.64 | 34.4 | 15.0 | | | |
| STAPLES (1) | 9965.0 | 35 | 89 | 52.0 | 15.0 | 839 | 56 | 1.5 | 1.5 | 0.00 | 0.51 | 0.77 | 0.99 | 1.0 | 30.0 | | | |
| TJX (1) | 8066.1 | 26 | 49 | NA | 35.1 | 761 | 21 | 1.0 | 1.2 | 0.47 | 0.88 | 1.25 | 1.47 | 1.4 | 16.5 | | | |
| TOYS 'R' US (1) | 5161.1 | 20 | 37 | 0.9 | -1.6 | 127 | NM | 0.5 | 1.3 | 0.00 | 1.70 | 1.56 | 1.79 | 5.0 | 10.0 | | | |
| U.S. OFFICE PRODUCTS (4) | 200.8 | 6 | -93 | 10.7 | -12.8 | 39 | NM | 0.1 | 2.5 | 0.00 | 1.44 | 0.11 | 0.41 | 34.1 | 20.0 | | | |
| VALUE CITY DEPARTMENT STORES (7) | 330.6 | 10 | 15 | -14.7 | 7.3 | 118 | 16 | 0.3 | 0.8 | 0.00 | 0.12 | 0.63* | 1.10 | 5.5 | 20.0 | | | |
| VENATOR GROUP (1) | 1067.3 | 8 | 61 | NM | 4.5 | 107 | 12 | 0.2 | 0.7 | 0.00 | 1.57 | 0.82 | 1.19 | 15.1 | 13.0 | | | |
| WAL-MART STORES (1) | 169669.0 | 75 | 91 | 11.2 | 21.3 | 868 | 41 | 1.3 | 2.7 | 0.41 | 1.56 | 1.93 | 2.18 | 1.8 | 14.4 | | | |
| ZALE (7) | 1042.0 | 29 | 24 | 31.3 | 11.1 | 165 | 15 | 0.8 | 0.9 | 0.00 | 1.38 | 1.84* | 2.01 | 1.0 | 17.0 | | | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | | | | |
| 11379.8 45 3 30.6 9.3 362 28 1.7 1.8 0.98 1.60 1.62 2.30 19.2 17.2 | | | | | | | | | | | | | | | | | | |
| (A) ELECTRICAL PRODUCTS | | | | | | | | | | | | | | | | | | |
| GROUP AVERAGE 3816.5 42 -19 52.0 15.6 270 15 1.1 1.2 2.08 2.75 2.35 3.07 3.1 12.6 | | | | | | | | | | | | | | | | | | |
| COOPER INDUSTRIES 5082.3 49 0 11.8 14.6 235 19 1.3 1.3 2.69 3.26 3.24 3.55 1.7 11.5 | | | | | | | | | | | | | | | | | | |
| EATON 4877.5 68 -23 23.9 22.9 243 11 0.7 1.3 2.58 5.93 5.43 6.06 2.7 10.0 | | | | | | | | | | | | | | | | | | |
| HUBBELL 2653.7 40 -18 17.7 16.7 321 20 1.9 1.4 3.08 1.89 2.52 2.72 2.6 11.3 | | | | | | | | | | | | | | | | | | |
| MAGNETEK (6) 359.2 11 -42 NM 20.3 185 9 0.3 0.6 0.00 1.04 1.20* 1.41 5.0 17.0 | | | | | | | | | | | | | | | | | | |
| NATIONAL SERVICE INDUSTRIES (8) 1601.5 39 -22 11.7b 18.8 277 15 0.8 1.3 3.21 2.36 2.53* 2.77 1.4 11.5 | | | | | | | | | | | | | | | | | | |
| RAYCHEM (5) 2699.2 34 -21 220.9a 19.6 339 19 1.5 1.1 0.94 2.77 2.07* 2.14 4.2 15.0 | | | | | | | | | | | | | | | | | | |
| ROCKWELL INTERNATIONAL (9) 9442.3 49 -6 25.9b -3.4 291 NM 1.4 NM 2.08 2.01 -0.55* 2.86 3.9 12.0 | | | | | | | | | | | | | | | | | | |
| (B) ELECTRONICS | | | | | | | | | | | | | | | | | | |
| GROUP AVERAGE 10821.8 47 7 24.8 5.6 254 38 1.4 2.4 1.05 2.01 1.82 2.40 6.1 18.3 | | | | | | | | | | | | | | | | | | |
| GENERAL INSTRUMENT 4739.6 28 56 NA -2.4 318 NM 2.5 1.8 0.00 -0.11 0.76 0.93 3.2 20.0 | | | | | | | | | | | | | | | | | | |
| HARRIS (6) 3035.4 38 -17 2.2 7.3 189 26 0.8 1.9 2.53 2.63 1.66* 2.68 4.5 12.0 | | | | | | | | | | | | | | | | | | |
| HUGHES ELECTRONICS 15171.4 38 3 NA 2.2 184 84 2.6 2.5 2.64 1.07 0.46 0.79 8.9 32.5 | | | | | | | | | | | | | | | | | | |
| LITTON INDUSTRIES (7) 2779.9 61 6 37.3 15.5 228 16 0.6 1.6 0.00 3.40 3.82* 4.28 0.9 10.0 | | | | | | | | | | | | | | | | | | |
| MOTOROLA 37136.0 62 8 NA -6.7 312 NM 1.3 7.3 0.78 1.94 0.53 1.91 11.5 16.0 | | | | | | | | | | | | | | | | | | |
| QUALCOMM (9) 3873.7 55 9 51.3 11.3 405 37 1.2 1.1 0.00 1.28 1.47* 2.66 5.0 32.5 | | | | | | | | | | | | | | | | | | |
| RAYTHEON 18659.8 55 10 -3.8 4.0 176 49 1.0 1.6 1.45 2.18 3.43 3.89 2.1 10.0 | | | | | | | | | | | | | | | | | | |
| VARIAN ASSOCIATES (9) 1178.7 40 -22 37.3b 13.6 216 16 0.8 1.2 1.01 3.67 2.43* 2.04 13.0 13.5 | | | | | | | | | | | | | | | | | | |

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| COMPANY (FY) | MARKET
VALUE
(\$ MIL.) | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
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EQUITY | PRICE AS
% OF
BOOK
VALUE | P/E
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GROWTH
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% | 1997
ACTUAL | 1999 ESTIMATES FROM ANALYSTS | | | | |
|---------------------------------------|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|-----------------------------------|---------------------------|---------------------|----------------------------------|--|
| | | | | | | | | | | | | I/B/E/S
1998
ANALYST
EST | I/B/E/S
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% | |
| (C) INSTRUMENTS | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6220.1 | 46 | -9 | 18.1 | 12.7 | 472 | 27 | 1.5 | 1.7 | 0.81 | 0.67 | 1.76 | 2.36 | 8.4 | 17.8 | |
| BECKMAN COULTER | 1360.7 | 48 | 21 | NA | NM | 1573 | NM | 0.8 | 1.9 | 1.33 | -9.58 | 1.48 | 3.68 | 2.7 | 17.0 | |
| EMERSON ELECTRIC (9) | 28629.8 | 65 | 15 | 12.6b | 21.2 | 493 | 23 | 2.1 | 2.1 | 2.00 | 2.50 | 2.77* | 3.07 | 0.7 | 11.0 | |
| HONEYWELL | 10067.2 | 80 | 17 | 11.5 | 21.3 | 392 | 19 | 1.2 | 1.4 | 1.45 | 3.65 | 4.47 | 5.01 | 2.0 | 13.0 | |
| KLA-TENCOR (6) | 2977.4 | 34 | -12 | 26.9 | 7.8 | 247 | 32 | 2.8 | 1.0 | 0.00 | 1.24 | 1.52* | 0.51 | 27.5 | 23.5 | |
| PERKIN-ELMER (6) | 4644.2 | 93 | 31 | 7.5 | 8.5 | 801 | 64 | 2.9 | 4.6 | 0.73 | 2.63 | 1.12* | 3.19 | 1.9 | 18.0 | |
| TEKTRONIX (5) | 1268.7 | 27 | -32 | 6.4 | 7.4 | 185 | 27 | 0.6 | 2.1 | 1.79 | 1.60 | 0.96 | 2.17 | 12.9 | 13.5 | |
| TERADYNE | 2695.3 | 32 | 0 | 28.6 | 13.2 | 262 | 20 | 1.7 | 1.2 | 0.00 | 1.48 | 1.35 | 1.46 | 24.0 | 20.0 | |
| THERMO ELECTRON | 2680.3 | 17 | -62 | 20.7 | 9.4 | 121 | 14 | 0.7 | 0.7 | 0.00 | 1.41 | 1.23 | 1.21 | 1.7 | 19.0 | |
| THERMO INSTRUMENT SYSTEMS | 1657.3 | 14 | -61 | 31.1 | 12.3 | 174 | 15 | 1.0 | 0.6 | 0.00 | 1.09 | 0.93 | 0.92 | 2.2 | 25.0 | |
| (D) SEMICONDUCTORS & OTHER COMPONENTS | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 18797.2 | 45 | 21 | 30.7 | 6.3 | 399 | 32 | 2.3 | 1.7 | 0.49 | 1.39 | 1.06 | 1.83 | 41.7 | 18.4 | |
| ADVANCED MICRO DEVICES | 4023.1 | 28 | 56 | NM | 7.2 | 208 | NM | 1.7 | NM | 0.00 | -0.15 | -0.69 | 0.95 | 30.5 | 16.0 | |
| AMP | 10584.0 | 48 | 15 | 12.3 | 7.4 | 376 | 51 | 1.9 | 2.6 | 2.23 | 2.08 | 1.55 | 2.21 | 5.0 | 12.0 | |
| ANALOG DEVICES (10) | 3323.6 | 20 | -26 | 37.6 | 10.9 | 284 | 23 | 2.6 | 1.1 | 0.00 | 1.04 | 0.84 | 1.03 | 8.7 | 22.0 | |
| AVX (3) | 1689.2 | 19 | 5 | 39.0 | 10.7 | 198 | 19 | 1.4 | 2.1 | 1.34 | 1.53 | 0.62 | 0.96 | 10.4 | 15.0 | |
| INTEL | 179410.9 | 108 | 53 | 32.7 | 25.7 | 823 | 33 | 7.1 | 1.4 | 0.15 | 3.87 | 3.73 | 4.58 | 6.5 | 20.0 | |
| JABIL CIRCUIT (8) | 2146.0 | 58 | 46 | 103.1 | 22.2 | 872 | 39 | 1.7 | 1.3 | 0.00 | 1.37 | 1.48* | 2.91 | 7.2 | 30.0 | |
| LSI LOGIC | 2195.9 | 16 | -20 | 20.0 | -13.8 | 161 | NM | 1.6 | 1.5 | 0.00 | 1.12 | 0.52 | 0.76 | 16.2 | 20.0 | |
| MICRON TECHNOLOGY (8) | 8820.3 | 41 | 59 | NA | -8.7 | 328 | NM | 2.9 | NM | 0.00 | 1.55 | -1.10* | -0.21 | 361.9 | 15.0 | |
| MOLEX (6) | 5619.4 | 36 | 12 | 17.4 | 13.4 | 426 | 32 | 3.5 | 2.1 | 0.17 | 1.05 | 1.15* | 1.23 | 4.1 | 15.0 | |
| NATIONAL SEMICONDUCTOR (5) | 2388.7 | 14 | -45 | NM | -15.1 | 135 | NM | 1.0 | NM | 0.00 | -0.60 | -1.66 | 0.35 | 120.0 | 15.0 | |
| SCI SYSTEMS (6) | 2920.3 | 49 | 12 | NA | 17.8 | 375 | 24 | 0.4 | 1.1 | 0.00 | 1.69 | 2.13* | 2.45 | 0.9 | 20.0 | |
| SOLECTRON (8) | 7802.9 | 66 | 60 | 26.1 | 16.8 | 661 | 40 | 1.5 | 1.6 | 0.00 | 1.37 | 1.65* | 2.32 | 2.7 | 25.0 | |
| TEXAS INSTRUMENTS | 29779.1 | 76 | 70 | -5.3 | -0.7 | 494 | NM | 3.3 | 2.2 | 0.45 | 0.76 | 1.73 | 2.89 | 8.3 | 20.2 | |
| THOMAS & BETTS | 2457.6 | 43 | -8 | 24.2 | 8.8 | 249 | 28 | 1.1 | 1.1 | 2.59 | 2.81 | 2.92 | 3.26 | 1.8 | 13.0 | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | | |
| | 6375.3 | 35 | 2 | 18.9 | 25.4 | 817 | 42 | 1.0 | 2.0 | 1.16 | 1.06 | 1.40 | 1.80 | 4.4 | 13.4 | |
| (A) FOOD DISTRIBUTION | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2072.9 | 23 | -5 | 12.4 | 7.6 | 257 | 39 | 0.2 | 1.3 | 1.29 | 1.02 | 0.94 | 1.45 | 3.5 | 14.5 | |
| FLEMING | 387.7 | 10 | 25 | 0.0 | 3.3 | 34 | 10 | 0.0 | 1.2 | 0.80 | 1.02 | 1.21 | 1.28 | 14.1 | 7.0 | |
| INTERNATIONAL MULTIFOODS (2) | 476.8 | 25 | -10 | NM | 1.4 | 192 | 141 | 0.2 | 1.3 | 3.15 | 1.08 | 1.31 | 1.54 | 0.6 | 15.0 | |
| PERFORMANCE FOOD GROUP | 308.2 | 25 | 3 | 15.2 | 10.1 | 210 | 21 | 0.2 | 1.0 | 0.00 | 1.06 | 1.23 | 1.47 | 1.4 | 19.8 | |
| RICHFOOD HOLDINGS (4) | 882.0 | 19 | -35 | 25.1 | 15.3 | 252 | 16 | 0.2 | 0.8 | 1.08 | 1.15 | 1.62 | 1.89 | 2.1 | 15.0 | |
| SMART & FINAL | 239.3 | 11 | -41 | NA | -3.0 | 117 | NM | 0.1 | 1.5 | 1.88 | 0.29 | 0.46 | 0.81 | 6.2 | 15.0 | |
| SUPERVALU (2) | 3110.4 | 26 | 23 | 9.3 | 14.6 | 249 | 17 | 0.2 | 1.4 | 2.05 | 1.83 | 1.56 | 1.72 | 1.7 | 11.5 | |
| SYSCO (6) | 9006.2 | 27 | 18 | 12.6 | 23.7 | 646 | 27 | 0.6 | 2.2 | 1.34 | 0.85 | 0.95* | 1.06 | 0.9 | 13.0 | |
| U.S. FOODSERVICE (6) | 2172.3 | 46 | 24 | NM | -5.0 | 357 | NM | 0.4 | NM | 0.00 | 0.87 | -0.83* | 1.80 | 1.1 | 20.0 | |
| (B) FOOD PROCESSING | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 7506.8 | 39 | -2 | 14.2 | 31.9 | 1097 | 43 | 1.5 | 2.4 | 1.20 | 1.00 | 1.50 | 1.97 | 4.2 | 13.0 | |
| ARCHER DANIELS MIDLAND (6) | 10900.9 | 18 | 11 | -3.2 | 6.1 | 170 | 28 | 0.7 | 2.6 | 1.09 | 0.63 | 0.68* | 0.91 | 14.3 | 10.5 | |
| BESTFOODS | 16609.7 | 58 | 8 | 6.1 | 66.7 | 1894 | 27 | 2.0 | 2.2 | 1.69 | 1.43 | 2.22 | 2.50 | 1.6 | 11.8 | |
| CAMPBELL SOUP (7) | 25592.0 | 57 | -2 | 7.2 | 82.3 | 3004 | 37 | 3.8 | 3.1 | 1.47 | 1.33 | 1.50* | 2.16 | 1.4 | 12.4 | |
| CHIKUITA BRANDS INTERNATIONAL | 735.8 | 11 | -31 | NM | 1.1 | 113 | NM | 0.3 | 1.3 | 1.78 | -0.29 | 0.85 | 1.15 | NA | 10.0 | |
| CONAGRA (5) | 15382.4 | 31 | -5 | 11.2 | 21.8 | 534 | 23 | 0.6 | 1.7 | 2.27 | 1.36 | 1.47 | 1.64 | 4.3 | 12.6 | |
| CORN PRODUCTS INTERNATIONAL | 1005.9 | 28 | -6 | NA | 4.2 | 101 | 25 | 0.7 | 2.6 | 1.14 | -2.02 | 1.20 | 2.10 | 12.4 | 9.0 | |
| DEAN FOODS (5) | 1790.1 | 46 | -24 | 11.0 | 13.6 | 281 | 22 | 0.6 | 1.4 | 1.85 | 2.13 | 2.66 | 3.07 | 3.6 | 12.0 | |
| DOLE FOOD | 1873.5 | 32 | 31 | NA | 19.0 | 254 | 13 | 0.4 | 1.3 | 1.27 | 2.65 | 2.11 | 2.50 | 7.2 | 11.9 | |
| EARTHGRAINS (3) | 1380.9 | 32 | 37 | NA | 6.8 | 220 | 32 | 0.8 | 1.6 | 0.50 | 0.89 | 1.18 | 1.40 | 7.9 | 17.0 | |
| GENERAL MILLS (5) | 11566.6 | 76 | 5 | 5.7 | 296.6 | 7933 | 28 | 1.9 | 2.1 | 2.81 | 2.60 | 3.62 | 4.00 | 2.3 | 9.8 | |
| HEINZ (H.J.) (4) | 21112.2 | 58 | 15 | 8.3 | 35.8 | 953 | 28 | 2.3 | 2.3 | 2.35 | 2.15 | 2.38 | 2.65 | 1.5 | 10.5 | |
| HERSHEY FOODS | 9624.1 | 67 | 9 | 8.1 | 35.9 | 995 | 28 | 2.2 | 2.5 | 1.43 | 2.23 | 2.47 | 2.75 | 1.9 | 11.0 | |
| HORMEL FOODS (10) | 2176.3 | 30 | -10 | 2.2 | 17.7 | 277 | 16 | 0.7 | 1.8 | 2.17 | 1.43 | 1.66 | 1.91 | 4.7 | 10.0 | |
| IBP | 2355.7 | 25 | 21 | 11.3 | 10.2 | 179 | 18 | 0.2 | 1.8 | 0.39 | 1.25 | 1.76 | 1.80 | 8.9 | 8.0 | |
| INTERNATIONAL HOME FOODS | 1520.2 | 20 | -30 | NA | 8.5 | 2551 | 178 | 0.9 | 1.1 | 0.00 | 0.36 | 1.15 | 1.38 | 2.9 | 15.0 | |
| INTERSTATE BAKERIES (5) | 1893.0 | 26 | -30 | 45.3 | 23.0 | 329 | 15 | 0.6 | 1.2 | 1.07 | 1.71 | 1.81 | 2.12 | 3.8 | 12.0 | |
| KEEBLER FOODS | 2829.4 | 34 | NA | NA | 28.8 | 951 | 34 | 1.3 | 2.2 | 0.00 | 0.77 | 1.02 | 1.31 | 4.0 | 15.0 | |
| KELLOGG | 14851.4 | 37 | -26 | -1.9 | 51.1 | 1553 | 31 | 2.2 | 2.7 | 2.57 | 1.36 | 1.35 | 1.48 | 2.7 | 10.0 | |
| MCCORMICK (11) | 2426.3 | 33 | 19 | 6.3 | 28.3 | 673 | 24 | 1.3 | 2.0 | 1.92 | 1.29 | 1.46 | 1.65 | 1.8 | 11.2 | |
| NABISCO HOLDINGS | 10569.7 | 40 | -18 | NA | 2.1 | 269 | 133 | 1.2 | 2.7 | 1.76 | 1.61 | 1.20 | 1.32 | 4.5 | 12.5 | |
| PILGRIM'S PRIDE (9) | 669.0 | 24 | 56 | 16.5b | 21.7 | 290 | 13 | 0.5 | 1.0 | 0.25 | 1.49 | 1.81* | 1.88 | 5.3 | 13.5 | |
| PIONEER HI-BRED INTERNATIONAL (8) | 7194.9 | 30 | -16 | 9.0 | 20.9 | 577 | 28 | 3.9 | 1.8 | 1.34 | 0.98 | 1.08* | 1.18 | 5.1 | 15.0 | |
| QUAKER OATS | 8362.7 | 61 | 16 | NM | 110.6 | 4458 | 37 | 1.7 | 2.4 | 1.86 | -6.80 | 2.31 | 2.56 | 1.6 | 11.0 | |
| RALSTON PURINA (9) | 10869.3 | 35 | 12 | 33.0ab | 28.5 | 998 | 29 | 2.3 | 2.5 | 1.15 | 1.05 | 1.19* | 1.38 | 1.5 | 11.8 | |
| SARA LEE (6) | 26660.8 | 58 | 4 | NM | -21.5 | 1376 | NM | 1.3 | NM | 1.71 | 1.97 | -1.14* | 2.65 | 1.2 | 13.8 | |
| SMITHFIELD FOODS (4) | 992.4 | 26 | -20 | NA | 16.2 | 279 | 18 | 0.3 | 0.9 | 0.00 | 1.34 | 1.50 | 1.97 | 6.1 | 20.0 | |
| STARBUCKS (9) | 4125.2 | 46 | 20 | 49.5b | 8.9 | 539 | 62 | 3.2 | 1.9 | 0.00 | 0.66 | 0.75* | 1.25 | 2.5 | 32.0 | |
| SUIZA FOODS | 1667.6 | 14 | -20 | 44.8 | NA | 258 | NA | 0.6 | 0.9 | 0.00 | 1.25 | 2.88 | 3.34 | 0.6 | 17.5 | |

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EQUITY | PRICE AS
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% | |
| TYSON FOODS (9) | 4774.8 | 21 | 1 | 12b | 13 | 242 | 188 | 0.6 | 13.6 | 0.48 | 0.85 | 0.11* | 1.23 | 4.1 | 13.8 | |
| VLASIC FOODS INTERNATIONAL (7) | 983.7 | 22 | NA | NA | -16.1 | 856 | NA | 0.7 | NM | 0.00 | NA | -0.13* | 1.08 | 4.6 | 10.0 | |
| WRIGLEY (WM.) JR. | 10214.3 | 88 | 11 | 11.8 | 25.9 | 891 | 34 | 5.1 | 2.8 | 0.91 | 2.34 | 2.53 | 2.82 | 2.1 | 12.4 | |
| (C) FOOD RETAILING | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6328.3 | 34 | 14 | 31.6 | 21.3 | 469 | 43 | 0.5 | 1.8 | 0.99 | 1.20 | 1.42 | 1.62 | 5.4 | 13.5 | |
| ALBERTSON'S (1) | 14009.4 | 57 | 21 | 11.8 | 21.5 | 527 | 25 | 0.9 | 1.8 | 1.19 | 2.08 | 2.35 | 2.68 | 1.9 | 13.2 | |
| AMERICAN STORES (1) | 9227.1 | 34 | 63 | 2.6 | 13.3 | 370 | 28 | 0.5 | 2.4 | 1.07 | 1.01 | 1.28 | 1.46 | 2.7 | 11.0 | |
| FOOD LION | 4957.3 | 10 | 21 | 146.6 | 17.4 | 313 | 18 | 0.5 | 1.3 | 1.46 | 0.36 | 0.57 | 0.64 | 3.1 | 13.5 | |
| GENERAL NUTRITION (1) | 1210.6 | 18 | -48 | 32.7 | 110.1 | 1462 | 13 | 0.9 | 0.6 | 0.00 | 1.24 | 1.37 | 1.54 | 3.2 | 20.0 | |
| GREAT ATLANTIC & PACIFIC TEA (2) | 1045.7 | 27 | 8 | 101.8 | 5.8 | 111 | 19 | 0.1 | 1.7 | 1.47 | 1.66 | 1.77 | 1.98 | 8.1 | 9.0 | |
| HANNAFORD BROTHERS | 1973.8 | 47 | 8 | 1.5 | 10.6 | 307 | 30 | 0.6 | 1.6 | 1.28 | 1.40 | 2.22 | 2.51 | 1.2 | 13.0 | |
| KROGER | 13570.0 | 53 | 44 | NA | NM | NM | 34 | 0.5 | 1.8 | 0.00 | 1.69 | 2.01 | 2.28 | 1.3 | 15.0 | |
| MARSH SUPERMARKETS (3) | 113.7 | 14 | -10 | 2.8 | 8.6 | 95 | 12 | 0.1 | 1.4 | 3.26 | 1.07 | 1.16 | 1.27 | 14.2 | 8.5 | |
| MEYER (FRED) (1) | 7859.9 | 51 | 40 | 3.0 | -0.2 | 372 | 283 | 0.6 | 2.3 | 0.00 | 1.46 | 1.45 | 1.95 | 3.6 | 15.0 | |
| RUDDICK (9) | 912.9 | 20 | 12 | 15.0ab | 11.4 | 222 | 20 | 0.4 | 1.6 | 1.64 | 1.02 | 1.00* | 1.17 | 8.5 | 12.0 | |
| SAFEWAY | 25667.1 | 53 | 67 | NA | 27.6 | 924 | 35 | 1.1 | 1.9 | 0.00 | 1.25 | 1.57 | 1.81 | 1.1 | 18.0 | |
| SOUTHLAND | 832.6 | 2 | -4 | NM | NM | NM | 18 | 0.1 | 2.1 | 0.00 | 0.16 | 0.14 | 0.19 | 10.5 | 7.0 | |
| WHOLE FOODS MARKET (9) | 1225.7 | 47 | -9 | NM | 17.8 | 481 | 28 | 0.9 | 1.2 | 0.00 | 1.06 | 1.64* | 2.01 | 0.5 | 24.0 | |
| WINN-DIXIE STORES (6) | 5990.0 | 40 | -8 | 2.0 | 12.3 | 444 | 36 | 0.4 | 3.0 | 2.53 | 1.36 | 1.33* | 1.18 | 15.3 | 10.0 | |
| 11 FOOD | | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 16958.2 | 37 | -21 | 18.6 | 8.9 | 257 | 33 | 1.2 | 2.6 | 2.11 | 2.39 | 1.47 | 2.10 | 21.4 | 11.4 | |
| (A) COAL, OIL & GAS | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 19073.7 | 40 | -13 | 17.8 | 9.0 | 267 | 34 | 1.2 | 3.1 | 2.36 | 2.50 | 1.34 | 2.15 | 24.3 | 10.0 | |
| AMERADA HESS | 5015.3 | 56 | 1 | -53.6a | -3.3 | 161 | NM | 0.7 | NM | 1.08 | 0.08 | -0.86 | 1.43 | 32.9 | 14.5 | |
| AMOCO | 56085.9 | 59 | 38 | 11.0 | 11.2 | 358 | 32 | 2.0 | 4.9 | 2.55 | 2.76 | 1.50 | 2.13 | 12.2 | 8.0 | |
| APACHE | 2248.4 | 23 | -34 | 26.4 | 3.8 | 121 | 29 | 2.2 | 4.4 | 1.22 | 1.65 | 0.44 | 1.09 | 24.8 | 12.0 | |
| ASHLAND (9) | 3695.5 | 49 | -9 | 11.5b | 9.5 | 173 | 18 | 0.6 | 2.3 | 2.26 | 2.51 | 2.63* | 4.03 | 5.2 | 8.0 | |
| ATLANTIC RICHFIELD | 21361.1 | 67 | -17 | 63.1 | 5.1 | 250 | 49 | 1.7 | 4.7 | 4.29 | 5.77 | 2.04 | 3.20 | 16.6 | 7.0 | |
| BURLINGTON RESOURCES | 6325.0 | 36 | -20 | NM | 4.0 | 209 | 52 | 3.6 | 4.5 | 1.54 | 1.79 | 0.61 | 1.07 | 28.0 | 13.0 | |
| CHEVRON | 54557.5 | 84 | 9 | 26.5 | 13.7 | 310 | 23 | 1.9 | 3.9 | 2.92 | 4.95 | 2.85 | 3.80 | 11.8 | 7.6 | |
| COASTAL | 7455.1 | 35 | 13 | 25.5 | 13.0 | 222 | 18 | 1.0 | 1.1 | 0.71 | 1.75 | 2.04 | 2.33 | 2.6 | 15.0 | |
| CONOCO | NA | 24 | NA | NA | NA | NA | NA | NA | 2.6 | 0.00 | 1.72 | 1.22 | 1.40 | 0.7 | 7.5 | |
| EXXON | 182325.0 | 75 | 23 | 12.9 | 16.9 | 417 | 25 | 1.7 | 4.0 | 2.19 | 3.37 | 2.71 | 3.01 | 7.3 | 7.0 | |
| KERR-McGEE | 1863.0 | 40 | -38 | 20.4 | 3.9 | 112 | 29 | 1.3 | 3.7 | 4.56 | 4.04 | 1.26 | 2.80 | 19.6 | 8.5 | |
| MOBIL | 67032.9 | 86 | 19 | 12.7 | 13.2 | 351 | 27 | 1.4 | 3.6 | 2.65 | 4.01 | 3.02 | 3.71 | 10.0 | 8.0 | |
| MURPHY OIL | 1793.0 | 40 | -26 | 15.8 | 7.4 | 169 | 23 | 1.0 | 3.8 | 3.51 | 2.94 | 1.18 | 1.79 | 22.9 | 9.0 | |
| OCCIDENTAL PETROLEUM | 7004.9 | 20 | -31 | NM | 4.3 | 218 | 52 | 1.0 | 5.4 | 4.94 | 0.39 | 0.44 | 0.91 | 34.1 | 8.5 | |
| ORXY ENERGY | 1467.4 | 14 | -46 | NM | 12.0 | 1033 | 86 | 1.6 | NM | 0.00 | 1.62 | -0.17 | 0.49 | 77.6 | 10.0 | |
| PENNZOIL | 1774.2 | 37 | -44 | 0.2 | NA | 155 | 16 | 1.6 | NM | 2.69 | 3.76 | -0.51 | 1.85 | 40.5 | 12.0 | |
| PHILLIPS PETROLEUM | 10702.4 | 42 | -14 | 40.3 | 14.1 | 231 | 17 | 0.8 | 2.5 | 3.24 | 3.61 | 1.98 | 2.72 | 14.7 | 8.5 | |
| QUAKER STATE | 521.7 | 14 | 1 | NM | -6.1 | 159 | NM | 0.4 | 0.9 | 2.80 | -0.21 | 0.84 | 1.08 | 9.3 | 20.0 | |
| SUNOCO | 3168.6 | 34 | -19 | 38.6 | 14.1 | 198 | 13 | 0.4 | 1.4 | 2.95 | 2.70 | 2.76 | 3.32 | 6.0 | 8.5 | |
| TEXACO | 30836.0 | 58 | 6 | 22.2 | 11.2 | 258 | 22 | 0.9 | 3.1 | 3.12 | 4.87 | 1.99 | 2.91 | 15.5 | 9.3 | |
| TOSCO | 4000.8 | 26 | -31 | 16.0 | 12.7 | 193 | 16 | 0.3 | 1.4 | 0.92 | 1.37 | 1.73 | 2.33 | 8.6 | 10.5 | |
| ULTRAMAR DIAMOND SHAMROCK | 2251.1 | 26 | -20 | 3.6 | 1.1 | 149 | 135 | 0.2 | 1.7 | 4.29 | 1.94 | 1.70 | 2.59 | 13.5 | 9.0 | |
| UNION PACIFIC RESOURCES GROUP | 2809.4 | 11 | -54 | NA | 4.3 | 170 | 39 | 1.3 | NM | 1.79 | 1.33 | -0.62 | -0.18 | 177.8 | 12.0 | |
| UNOCAL | 8176.6 | 34 | -13 | 28.7 | 13.4 | 358 | 27 | 1.6 | 4.4 | 2.36 | 2.65 | 0.86 | 1.62 | 19.8 | 9.0 | |
| USX-MARATHON GROUP | 8283.6 | 28 | -16 | NM | 11.0 | 210 | 19 | 0.5 | 1.6 | 2.96 | 1.58 | 1.45 | 2.15 | 11.2 | 12.0 | |
| VALERO ENERGY | 1172.1 | 21 | -33 | NA | 4.3 | 100 | 24 | 0.2 | 1.9 | 1.52 | 2.03 | 1.47 | 2.52 | 12.2 | 7.5 | |
| VASTAR RESOURCES | 3990.1 | 41 | 13 | 17.1a | 30.7 | 661 | 21 | 2.2 | 3.1 | 0.74 | 2.46 | 1.55 | 2.00 | 22.0 | 8.5 | |
| (B) PETROLEUM SERVICES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 7790.8 | 26 | -55 | 23.7 | 8.5 | 211 | 27 | 1.0 | 0.8 | 0.98 | 1.89 | 2.04 | 1.86 | 7.9 | 17.5 | |
| BAKER HUGHES (9) | 5984.7 | 18 | -58 | 20.2 | -11.9 | 185 | NM | 1.0 | 1.1 | 2.51 | 0.70 | 1.11 | 1.04 | 6.8 | 15.0 | |
| BJ SERVICES (9) | 999.1 | 14 | -62 | 29.2b | 12.6 | 108 | 10 | 0.7 | 0.5 | 0.00 | 1.31 | 1.44* | 1.25 | 8.0 | 19.0 | |
| COOPER CAMERON | 1297.2 | 24 | -60 | NA | 22.2 | 171 | 9 | 0.7 | 0.5 | 0.00 | 2.53 | 2.81 | 2.39 | 9.2 | 18.0 | |
| HALLIBURTON | 12907.4 | 29 | -43 | NM | 1.7 | 319 | 79 | 0.8 | 1.0 | 1.70 | 1.75 | 1.85 | 1.98 | 6.2 | 16.4 | |
| SCHLUMBERGER | 24395.1 | 45 | 44 | 21.6 | 13.9 | 307 | 22 | 2.0 | 0.8 | 1.68 | 2.52 | 2.67 | 2.44 | 8.5 | 20.0 | |
| SMITH INTERNATIONAL | 1161.1 | 24 | -61 | NA | 12.3 | 179 | 13 | 0.6 | 0.6 | 0.00 | 2.55 | 2.35 | 2.07 | 8.8 | 16.5 | |
| 12 OIL & GAS | | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 22434.1 | 45 | 12 | 12.9 | 12.4 | 669 | 56 | 2.4 | 1.8 | 0.58 | 0.84 | 1.34 | 1.93 | 15.1 | 16.0 | |
| (A) DRUG DISTRIBUTION | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 9545.8 | 51 | 43 | 20.3 | 16.0 | 684 | 44 | 0.7 | 2.1 | 0.61 | 1.15 | 1.42 | 1.98 | 1.5 | 17.4 | |
| AMERISOURCE HEALTH (9) | 1531.1 | 64 | 10 | NM | 67.1 | 2033 | 31 | 0.2 | 1.5 | 0.00 | 1.97 | 2.08* | 3.33 | 0.6 | 20.0 | |
| BERGEN BRUNSWIG (9) | 3146.2 | 31 | 48 | 28.0b | 0.5 | 500 | NM | 0.2 | NM | 0.96 | 0.81 | 0.03* | 1.25 | 2.0 | 20.0 | |
| BINDLEY WESTERN INDUSTRIES | 853.1 | 39 | 67 | 19.9 | 8.2 | 227 | 28 | 0.1 | 1.8 | 0.21 | 1.19 | 1.44 | 1.70 | 2.4 | 15.0 | |
| CARDINAL HEALTH (6) | 13825.4 | 69 | 38 | 23.4 | 11.9 | 658 | 48 | 0.9 | 2.2 | 0.15 | 1.13 | 1.48* | 2.07 | 1.0 | 21.0 | |
| CVS | 19241.4 | 49 | 54 | -35.1 | 11.7 | 715 | 54 | 1.3 | 2.2 | 0.47 | 0.07 | 1.26 | 1.48 | 0.7 | 18.0 | |
| LONGS DRUG STORES (1) | 1386.1 | 36 | 11 | NA | 10.1 | 228 | 22 | 0.4 | 2.4 | 1.57 | 1.49 | 1.64 | 1.80 | 2.2 | 9.0 | |

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Good Design is Good Business

The Second Annual Business Week/Architectural Record Awards Panel Discussion and Luncheon

Charisse L. Waugh

How do you measure the success of a well-designed building? What is the process in which a client's list for utility, and an architect's plot at interpretation produces a mixture of both beauty and function? Office design really give business a competitive edge?

These were some of the questions fielded by a panel of architects and executives at the Second Annual Business Week/Architectural Record Awards Panel Discussion and Luncheon held at Chelsea in New York City on November 5th. Moderated by Steve Kroft of "60 Minutes," the discussion kicked off an afternoon in which the eight winning designs of the year's competition, "Good Design is Good Business," were lauded for, as one panelist put it, successfully "obeying the laws of economics — while creating an environment stimulating to workers."



Kroft, 60 Minutes and Dave Ferm, Moderator of Business Week

This year's winners included such diverse entries as a waste-transfer station in Eindhoven, The Netherlands, whose sleek design and planned metamorphosis into a museum won over an otherwise resistant constituency; and GAP Inc.'s new environmentally sound headquarters in San Francisco whose grass covered roof, atriums, and lap pool helps it woo the area's best talent. "We just want to create a great place to work cost-effectively," said GAP Inc.'s Senior Director of Environmental Affairs, Maria Angius, before sitting down to the luncheon. "We hope that getting this award will help other companies see that intelli-

gent design can be good for business and the environment."

Presented in association with the American Institute of Architects, approximately 200 invited guests came to the competition's culminating event. As enlarged images of the champion designs sat on display, the audience and panelists deliberated on how business executives and their architects reach design epiphany; and whether there was any measurable payoff to the company. "Virtually every submission made the claim for the design having improved the bottom line or employee morale," observed panelist and contest juror Sherri Geldin, director of the Wexner Center for the Arts in Columbus, Ohio. "Certainly the clients were convinced of it."

This year's program was sponsored by Herman Miller, Inc., Bentley Systems, Incorporated, and USG Corporation. Once again teamwork ruled as both the architect and client of each winning entry were presented with a sculpture created for the occasion by James Carpenter Designs.

Herman Miller is proving itself to be a loyal supporter of this marriage of industries. The office furniture manufacturer helped initiate the awards program by sponsoring its maiden voyage last year. "Good design is a hard nose business strategy," Gary S. Miller, executive vice-president at Herman Miller, Inc. told the gathering before the start of the morning panel.

Mark Schurman, the company's director of external communications, went further in explaining Herman Miller's commitment. "This gives us a great opportunity to celebrate well designed spaces which contribute to the performance of an organization." Best known for revolutionizing the corporate work



Panel Discussion: Good Design is Good Business lead by Steve Kroft of 60 Minutes. (below) Gary S. Miller, executive vice-president at Herman Miller, Inc. addressing the assembly.



environment with the introduction of the systems furniture, Herman Miller's vision aligns itself perfectly with the spirit of the awards according to Mark Schurman. "We believe that with the increasing impact of technology and the flattening of organizational hierarchies, the office of the future will require an even wider range of solutions. These awards are very forward thinking, because they demonstrate the crucial link that's needed between the architectural profession and business."

Bentley Systems Inc., headquartered in Exton PA, provides engineering software for large-scale building projects. According to Greg Bentley, president, sponsoring "Good Design is Good Business" simply reflects what he calls "the Bentley continuum." "We are trying to encourage



Greg Bentley, president
Bentley Systems, Incorporated

executives' aspirations in terms of how technology can help them manage their facility throughout its life cycle."

Bentley's integrated products and services save time and money for clients and architects by focusing on more than just design. Their software technology allows designers, builders, and managers to have, at the click of a mouse, the full scope of a building's engineering as long as it stands. According to Bentley, the company endeavors to "...promote business driven design by strengthening the relationship between executives and architects."

USG Corporation, the company who gave us the original brand name drywall, Sheetrock® Brand, now a standard in the industry, continues to build on its tradition of innovation through the aegis of the awards. "Innovation isn't just in the architecture, it's in the materials," says Carol Deely, manager of Strategic Marketing for USG. "As a leader in our business, we want to align ourselves with leaders in the architectural industry and their corporate clients. We believe that good design means better productivity. If people are happy in their space, they'll be more productive."

In three years USG will celebrate its 100th anniversary of helping designers solve problems by supplying them with building materials.



James S. Metcalf, senior vice-president of sales and marketing, USG Corporation

James Metcalf, senior vice-president of Sales and Marketing pledged USG's continuing commitment to good design in his opening remarks to those at the luncheon. "These awards honor the intangibles that will be the standard of the next millennium."

Victor C. W. Dzidzienyo, director of the School of Architecture and Design at Howard University in Washington, D.C., attended the program in order to keep his students on the cutting edge of design. "Business with architecture raises the level of design up a notch," he said. Before catching a train back to the Capital, Dzidzienyo obtained a promise



Luncheon Photo from left, Christopher Scott Hays, AIA, William McDonough+Partners, PLC; Kevin Burke, AIA, William McDonough+Partners, PLC; Maria Moyer-Angus, GAP, Inc.; Walter A Hunt, Jr., AIA, Gensler & Associates Architects; Elaine Shusterman, vice-president/publisher, Architectural Record; Arthur Gensler, Jr. FAIA, Gensler & Associates Architects; Charles B. Rose, AIA, Thompson & Rose Architects.

Good Design is Good Business The Second Annual Business Week Architectural Record Awards Panel Discussion and Luncheon

from Kas Oosterhuis, architect of the waste-transfer station, to be a guest lecturer at Howard University in 1999.

The college professor was not at all surprised that it was Herman Miller, USG, and Bentley Systems that made the afternoon possible. "They each played a role in bringing design to the next level. Herman Miller represents function, materials, and Bentley technology. By coming together here they are simply refining the process." ■

1995 Award Recipients

Praxair Distribution Center Ankenny, IA

Client: Praxair Distribution
Architect: Herbert Lewis Kruse Blunck Architecture

Waste-Transfer Station Zenderen, The Netherlands

Client: Regio Twente
Architect: Oosterhuis Associates

QMR Plastics Division River Falls, WI

Client: Quadron Corp
Architect: James Snow Architects

GAP, Inc. 901 Cherry Office Building San Bruno, CA

Client: GAP, Inc.
Architect: William McDonough + Partners
Gensler

Futures by Temps Reston, VA

Client: Temps & Co.
Architect: Adamstein & Demetriou Associates

McNitt Building Oklahoma City, OK

Client: K.J. McNitt Construction Company
Architect: Elliott + Associates Architects

Osho International Offices New York, NY

Client: Osho International
Architect: Daniel Rowen Architects

The New York Times Printing Plant College Point, NY

Client: The New York Times
Architect: Polshek and Partners Architects

Compliments to the winners of the
1998 Business Wire Award for Best Record Award

presented in association with

The American Institute of Architects

in New York City on November 3



Special thanks to Bentley Systems, Incorporated,
Herman Miller Inc. and USG Corporation for their
generous support of the panel discussion and luncheon.



Kris Kringle

Quite concerned with elf overtime, Mikey Malaney (naughty or nice?) and how much collision avoidance systems will improve flight safety this season.



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|--------------------------------|------------------------|--------------------|---------------------|---------------------------|------------------|--------------------------|-----------|-------------------|--------------------|---------|-------------|-------------------|------------------------------|-------------|-------------------------|----|--------------------|
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| ANY (FY) | | | | | | | | | | | | | | | | | |
| ON (3) | 7067.0 | 71 | 31 | NA | 7.9 | 433 | 54 | 0.3 | 1.3 | 0.70 | 1.59 | 2.31 | 3.02 | 1.0 | 24.0 | NR | |
| I (2) | 12018.7 | 47 | 58 | 70.2 | 6.5 | 420 | 48 | 1.0 | 2.1 | 0.93 | 1.22 | 1.50 | 1.76 | 2.8 | 15.0 | A- | |
| EN (8) | 26842.9 | 54 | 72 | 15.2b | 19.9 | 942 | 50 | 1.8 | 3.4 | 0.48 | 0.88 | 1.07* | 1.44 | 0.8 | 15.0 | A+ | |
| JGS & RESEARCH | | | | | | | | | | | | | | | | | |
| AVERAGE | 80146.9 | 82 | 51 | 18.1 | 30.7 | 1351 | 44 | 7.0 | 2.5 | 1.07 | 1.64 | 2.27 | 2.63 | 2.0 | 15.0 | | |
| LABORATORIES | 72895.5 | 48 | 47 | 12.6 | 42.3 | 1356 | 33 | 5.9 | 2.6 | 1.25 | 1.34 | 1.53 | 1.71 | 0.6 | 12.0 | A+ | |
| IN | 3996.3 | 61 | 81 | 5.5 | -11.1 | 605 | NM | 3.2 | 2.2 | 0.85 | 1.95 | 1.97 | 2.31 | 4.3 | 14.0 | B+ | |
| AN HOME PRODUCTS | 70348.5 | 53 | 40 | 7.5 | 28.8 | 752 | 26 | 5.1 | 2.4 | 1.69 | 1.56 | 1.83 | 2.03 | 1.5 | 12.0 | A+ | |
| | 19151.1 | 75 | 39 | NA | 34.3 | 816 | 25 | 7.5 | 1.8 | 0.00 | 2.35 | 3.28 | 3.60 | 2.9 | 13.0 | B | |
| -MYERS SQUIBB | 121215.8 | 122 | 29 | 14.1 | 46.8 | 1606 | 35 | 6.8 | 2.5 | 1.28 | 3.14 | 3.69 | 4.18 | 0.7 | 13.0 | A | |
| LI) | 98627.2 | 90 | 29 | NM | 44.2 | 2187 | 51 | 10.3 | 2.8 | 0.89 | -0.35 | 2.00 | 2.36 | 1.7 | 16.0 | A- | |
| | 183209.7 | 155 | 46 | 19.6 | 40.5 | 1459 | 47 | 7.2 | 2.6 | 1.39 | 3.74 | 4.34 | 5.02 | 1.4 | 14.0 | A+ | |
| | 145271.2 | 112 | 50 | 36.3 | 25.5 | 1680 | 67 | 11.0 | 2.7 | 0.68 | 1.70 | 2.06 | 2.58 | 2.8 | 20.0 | A | |
| ACIA & UPJOHN | 26482.2 | 52 | 42 | NA | 7.3 | 171 | 66 | 3.9 | 2.7 | 2.07 | 0.61 | 1.59 | 1.82 | 2.7 | 12.0 | NR | |
| NG-POUGH | 78461.3 | 53 | 72 | 17.6 | 45.5 | 2124 | 47 | 10.1 | 3.0 | 0.82 | 0.98 | 1.19 | 1.39 | 1.4 | 15.0 | A+ | |
| R-LAMBERT | 61956.9 | 76 | 82 | 31.8 | 33.5 | 1806 | 55 | 6.4 | 2.1 | 0.85 | 1.04 | 1.52 | 1.99 | 1.6 | 23.8 | A | |
| ALTH-CARE SERVICES | | | | | | | | | | | | | | | | | |
| AVERAGE | 2622.3 | 23 | -23 | 10.1 | 4.0 | 238 | 35 | 0.5 | 1.2 | 0.16 | 0.23 | 1.00 | 1.52 | 30.8 | 16.0 | | |
| AN MEDICAL SECURITY GROUP | 237.2 | 14 | -44 | -17.7 | 3.1 | 86 | 28 | 0.2 | 1.9 | 3.35 | 1.10 | 0.50 | 0.95 | 6.3 | 15.0 | NR | |
| EALTHCARE GROUP | 362.4 | 7 | -48 | NM | NM | NM | NM | 0.4 | NM | 0.00 | -5.30 | -0.58 | 0.05 | 480.0 | 10.0 | NR | |
| / ENTERPRISES | 588.7 | 6 | 56 | 7.9 | 6.1 | 68 | 11 | 0.2 | 0.5 | 0.00 | 0.57 | 0.79 | 0.90 | 4.4 | 15.0 | B- | |
| IA/HCA HEALTHCARE | 15893.0 | 25 | -17 | -30.2 | -2.5 | 206 | NM | 0.9 | 1.6 | 0.33 | 0.27 | 1.16 | 1.55 | 10.3 | 13.3 | NR | |
| RY HEALTH CARE | 437.6 | 7 | 51 | -17.3 | -3.4 | 101 | NM | 0.2 | 1.0 | 0.00 | 0.36 | 0.48 | 0.58 | 12.1 | 15.0 | C | |
| S SCRIPTS | 1821.9 | 55 | 83 | 38.8 | 16.8 | 769 | 46 | 0.8 | 1.5 | 0.00 | 1.01 | 1.28 | 1.70 | 0.6 | 27.8 | NR | |
| TION HEALTH SYSTEMS | 1687.8 | 14 | -38 | NM | -3.6 | 199 | NM | 0.2 | 1.0 | 0.00 | -0.55 | 0.96 | 1.22 | 6.6 | 15.0 | NR | |
| S HEALTH VENTURES (9) | 334.0 | 10 | -64 | 19.1b | -3.7 | 52 | NM | 0.2 | NM | 0.00 | 1.34 | -0.68* | 1.16 | 6.0 | 17.3 | NR | |
| SOUTH | 5681.3 | 13 | -52 | 42.6 | 9.1 | 156 | 17 | 1.5 | 0.7 | 0.00 | 0.91 | 1.10 | 1.12 | 4.5 | 18.5 | B+ | |
| A | 3308.3 | 20 | -5 | 17.3 | 7.4 | 203 | 28 | 0.3 | 1.0 | 0.00 | 1.05 | 1.27 | 1.48 | 2.0 | 15.0 | B | |
| ATED HEALTH SERVICES | 578.7 | 11 | 64 | NM | 5.1 | 44 | 14 | 0.2 | 0.2 | 0.18 | -0.39 | 3.04 | 2.95 | 18.6 | 18.0 | NR | |
| TORY CORP. OF AMERICA HOLDINGS | 163.4 | 1 | -25 | NM | -20.1 | 126 | NM | 0.1 | NM | 0.00 | -1.06 | -0.01 | 0.06 | 33.3 | 7.0 | C | |
| AN HEALTH SERVICES (9) | 295.8 | 9 | -56 | NM | 7.2 | 155 | 21 | 0.2 | 1.7 | 0.00 | 0.16 | 0.44* | 1.27 | 16.5 | 12.5 | NR | |
| ITNERS | 875.3 | 5 | -79 | NM | NM | 1449 | NM | 0.1 | 3.1 | 0.00 | -3.73 | 0.10 | 0.48 | 16.7 | 15.0 | NR | |
| HEALTH PLANS | 889.3 | 11 | -29 | NM | NM | NM | NM | 0.2 | NM | 0.00 | -3.70 | -4.50 | 1.1* | 46.1 | 20.0 | B | |
| ARE HEALTH SYSTEMS | 3482.6 | 75 | 44 | NA | 1.0 | 160 | 222 | 0.4 | 1.0 | 0.00 | -0.75 | 4.47 | 5.27 | 3.8 | 17.0 | B | |
| DIAGNOSTICS | 533.9 | 18 | 6 | NA | -2.8 | 95 | NM | 0.4 | 1.0 | 0.00 | -0.77 | 0.89 | 1.0* | 20.0 | 20.0 | NR | |
| A HEALTH GROUP (6) | 1259.1 | 17 | -36 | 10.1 | 14.0 | 194 | 14 | 0.8 | 0.8 | 0.00 | 1.11 | 1.1* | 1.1* | 0.7 | 18.6 | NR | |
| ALTHCARE GROUP | 327.0 | 5 | -73 | -5.6 | -5.6 | 57 | NM | 0.1 | 0.4 | 0.00 | 1.1* | 1.1* | 1.19 | 1.1 | 15.0 | NR | |
| HEALTHCARE (5) | 9152.4 | 30 | 11 | 12.4 | 10.9 | 250 | 23 | 0.9 | 1.1 | 0.00 | 1.22 | 1.83 | 2.31 | 2.2 | 15.0 | B- | |
| HEALTHCARE | 1567.8 | 37 | 42 | NA | 9.4 | 191 | 1* | 0.7 | 1.5 | 0.00 | 2.24 | 1.70 | 1.94 | 1.0 | 15.0 | NR | |
| HEALTHCARE | 8458.9 | 45 | -9 | 16.5 | -4.5 | 206 | NM | 0.5 | 1.0 | 0.07 | 2.26 | 1.1* | 2.98 | 3.4 | 17.0 | B+ | |
| SAL HEALTH SERVICES | 1748.3 | 54 | 6 | 23.6 | 11.0 | 279 | 24 | 1.0 | 1.2 | 0.00 | 2.03 | 2.38 | 2.88 | 1.0 | 19.0 | B+ | |
| | 305.4 | 5 | 8* | 11.2 | 6.8 | 35 | 5 | 0.1 | NM | 0.00 | 1.92 | -0.05 | 0.32 | 50.0 | 15.0 | B | |
| INT HEALTH NETWORKS | 5567.4 | 82 | 95 | 4.1 | 25.3 | 437 | 18 | 0.9 | 1.5 | 0.00 | 3.27 | 3.71 | 4.28 | 0.9 | 15.0 | B | |
| DICAL PRODUCTS | | | | | | | | | | | | | | | | | |
| AVERAGE | 20079.2 | 52 | 28 | 6.9 | 7.6 | 897 | 115 | 3.9 | 2.1 | 1.09 | 1.21 | 1.07 | 2.11 | 2.5 | 15.6 | | |
| ..R.) | 2522.9 | 46 | 46 | 3.0 | 20.2 | 454 | 23 | 2.1 | 2.4 | 1.66 | 1.26 | 1.21 | 2.20 | 1.8 | 11.0 | B+ | |
| I & LOMB | 3113.0 | 56 | 40 | -21.5 | 5.9 | 365 | 64 | 1.4 | 2.0 | 1.87 | 0.89 | 2.34 | 2.76 | 2.5 | 12.0 | B | |
| INTERNATIONAL | 18166.0 | 64 | 26 | NM | 10.6 | 673 | 63 | 2.8 | 1.9 | 1.83 | 1.06 | 2.59 | 2.91 | 1.4 | 13.0 | B | |
| , DICKINSON (9) | 10507.4 | 43 | 70 | 14.2b | 15.8 | 720 | 47 | 3.4 | 3.4 | 0.68 | 1.15 | 0.90* | 1.61 | 1.9 | 14.0 | A | |
| I SCIENTIFIC | 9724.8 | 25 | 8 | 19.7 | -46.9 | 1341 | NM | 4.8 | 1.2 | 0.00 | 0.40 | 0.80 | 1.05 | 5.3 | 25.0 | NR | |
| T | 12926.7 | 86 | 38 | NA | 4.6 | 2496 | 660 | 6.8 | 1.8 | 0.06 | 1.00 | 2.37 | 2.67 | 2.3 | 20.0 | NR | |
| N & JOHNSON | 109275.7 | 81 | 23 | 15.9 | 25.9 | 784 | 31 | 4.8 | 2.3 | 1.23 | 2.41 | 2.73 | 3.07 | 1.3 | 13.0 | A+ | |
| CKRODT (6) | 2311.0 | 32 | -15 | NA | 6.0 | 248 | 42 | 0.9 | NM | 2.04 | 2.33 | -4.89* | 2.28 | 0.9 | 12.0 | B | |
| ONIC (4) | 31691.8 | 68 | 29 | 17.7 | 22.3 | 1529 | 69 | 11.7 | 2.5 | 0.38 | 0.96 | 1.44 | 1.74 | 2.9 | 19.0 | A+ | |
| & MINOR | 553.0 | 17 | 17 | -0.8 | 11.2 | 357 | 31 | 0.2 | 1.4 | 1.18 | 0.60 | 0.74 | 0.86 | 4.7 | 17.0 | B+ | |
| TRY AVERAGE | | | | | | | | | | | | | | | | | |
| | 2353.4 | 35 | 8 | 19.0 | 19.9 | 248 | 14 | 0.8 | 1.0 | 1.03 | 2.11 | 2.92 | 3.25 | 4.4 | 13.9 | | |
| ILDING MATERIALS | | | | | | | | | | | | | | | | | |
| AVERAGE | 3664.7 | 43 | 10 | 24.9 | 22.5 | 317 | 17 | 1.1 | 1.3 | 1.47 | 2.29 | 3.16 | 3.38 | 4.5 | 11.5 | | |
| AN STANDARD | 2440.3 | 34 | -11 | 14.1 | NM | NM | 13 | 0.4 | 1.0 | 0.00 | 1.57 | 3.02 | 3.13 | 5.9 | 11.0 | NR | |
| MANVILLE | 2289.5 | 14 | 43 | NA | 22.2 | 301 | 14 | 1.3 | 1.1 | 1.66 | 0.80 | 0.97 | 1.11 | 9.0 | 14.0 | B | |
| E | 2678.0 | 37 | 25 | 124.9 | 17.8 | 200 | 12 | 1.2 | 1.3 | 1.62 | 2.54 | 3.11 | 3.33 | 3.6 | 9.0 | B | |
| | 9825.3 | 29 | 14 | 13.7 | 17.2 | 369 | 21 | 2.3 | 1.4 | 1.52 | 1.15 | 1.38 | 1.56 | 2.6 | 15.0 | B | |
| CORNING | 2024.2 | 37 | 9 | NA | NM | NM | 23 | 0.4 | 0.9 | 0.80 | 1.17 | 3.46 | 4.29 | 9.1 | 11.5 | B- | |
| USTRIES | 10841.8 | 61 | 7 | 30.0 | 27.3 | 371 | 14 | 1.4 | 1.5 | 2.35 | 3.94 | 4.16 | 4.27 | 6.3 | 10.0 | A- | |
| | 1809.7 | 16 | 7 | 10.8 | 12.2 | 244 | 19 | 1.1 | 1.4 | 2.87 | 0.84 | 0.95 | 1.08 | 1.9 | 12.0 | A+ | |
| IN-WILLIAMS | 4880.5 | 28 | 2 | 12.9 | 15.8 | 285 | 18 | 1.0 | 1.5 | 1.59 | 1.50 | 1.57 | 1.73 | 2.3 | 12.0 | A+ | |
| SEH PRODUCTS | 1043.4 | 50 | 2 | 5.4 | 9.2 | 103 | 11 | 0.6 | 1.1 | 2.42 | 4.59 | 4.39 | 4.92 | 2.8 | 10.0 | B+ | |

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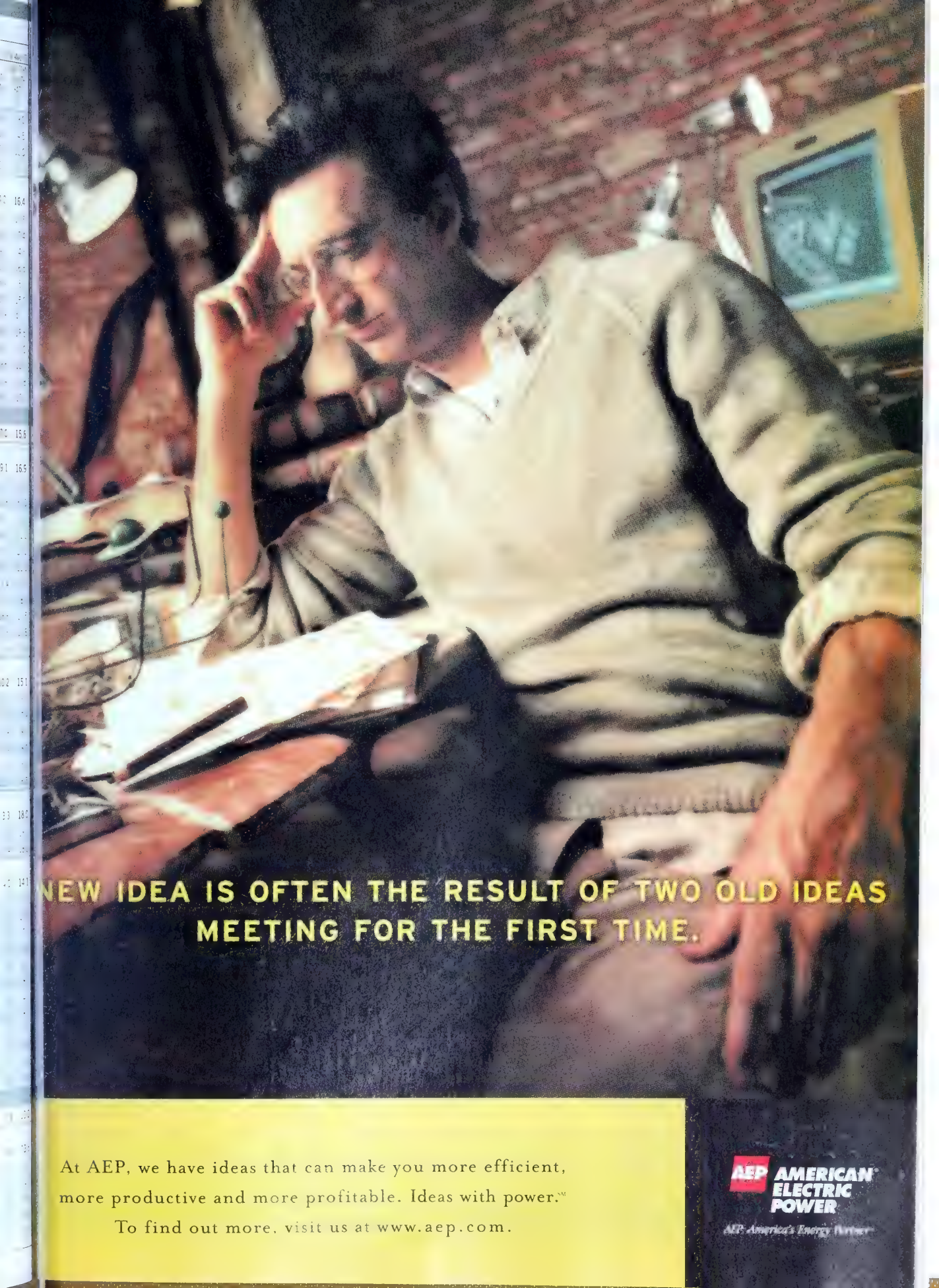
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| COMPANY (Y) | MARKET
VALUE
(\$ MIL.) | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
ON
EQUITY | PRICE AS
% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYST | | | |
|---|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|-------------------------|-----------------------------|---------------------|----------------------------------|--|
| | | | | | | | | | | | | | 1998
CON
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% | |
| USG | 2456.4 | 49 | 1 | NM | 72.1 | 567 | 8 | 0.8 | 0.9 | 0.20 | 3.03 | 6.41 | 6.11 | 6.5 | 9.0 | |
| VALSPAR (11) | 1457.6 | 33 | 4 | 13.1b | 21.2 | 428 | 20 | 1.3 | 1.4 | 1.26 | 1.49 | 1.63* | 1.82 | 1.6 | 14.5 | |
| VULCAN MATERIALS | 4203.1 | 125 | 23 | 26.7 | 22.3 | 378 | 17 | 2.4 | 1.5 | 1.66 | 6.10 | 7.04 | 7.23 | 5.1 | 12.0 | |
| YORK INTERNATIONAL | 1691.5 | 42 | 6 | -13.8 | 10.0 | 238 | 24 | 0.5 | 1.4 | 1.14 | 1.10 | 3.02 | 3.40 | 2.1 | 10.0 | |
| (B) CONSTRUCTION & REAL ESTATE | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 932.8 | 27 | 6 | 11.5 | 17.5 | 185 | 12 | 0.4 | 0.8 | 0.56 | 1.90 | 2.66 | 3.10 | 4.2 | 16.4 | |
| CENTEX (3) | 2123.9 | 36 | 13 | NA | 17.2 | 196 | 12 | 0.5 | 0.8 | 0.45 | 2.36 | 3.47 | 3.69 | 2.2 | 12.5 | |
| CHAMPION ENTERPRISES | 1070.5 | 22 | 9 | 35.7 | 23.8 | 282 | 12 | 0.5 | 0.7 | 0.00 | 1.45 | 1.91 | 2.16 | 3.2 | 17.4 | |
| FLEETWOOD ENTERPRISES (4) | 1169.3 | 34 | 21 | NA | 27.1 | 218 | 11 | 0.4 | 0.7 | 2.14 | 3.01 | 3.17 | 3.37 | 4.3 | 14.5 | |
| HURTON (D.R.) (9) | 1007.0 | 19 | 9 | 20.4b | 21.8 | 235 | 12 | 0.5 | 0.7 | 0.48 | 1.15 | 1.56* | 1.94 | 1.5 | 16.5 | |
| KAUFMAN & BROAD HOME (11) | 1005.1 | 25 | 12 | 10.9 | 19.0 | 235 | 13 | 0.4 | 0.8 | 1.19 | 1.44 | 2.16 | 2.95 | 6.4 | 15.0 | |
| LENNAR (11) | 1293.5 | 22 | 3 | 6.3 | 13.1 | 199 | 14 | 0.6 | 0.7 | 0.23 | 1.34 | 2.23 | 2.81 | 2.1 | 15.0 | |
| NVR | 425.8 | 39 | 80 | NA | 33.2 | 252 | 9 | 0.3 | 0.2 | 0.00 | 2.18 | 5.37 | 5.95 | 2.8 | 40.1 | |
| OAKWOOD HOMES (9) | 696.2 | 15 | -55 | NA | 10.6 | 134 | 13 | 0.5 | 0.7 | 0.27 | 1.75 | 1.17* | 1.85 | 6.0 | 18.5 | |
| PULTE | 1098.0 | 25 | 22 | 3.2 | 9.1 | 124 | 14 | 0.4 | 1.1 | 0.63 | 1.14 | 2.25 | 2.60 | 5.0 | 10.0 | |
| RYLAND GROUP | 390.1 | 27 | 13 | NA | 10.5 | 119 | 12 | 0.2 | 1.2 | 0.60 | 1.32 | 2.21 | 2.57 | 9.8 | 10.0 | |
| U.S. HOME | 434.3 | 32 | -19 | -16.0 | 12.0 | 87 | 7 | 0.3 | 0.7 | 0.00 | 3.50 | 4.09 | 4.66 | 2.4 | 11.8 | |
| WEBB (DEL) | 479.5 | 27 | 2 | 20.1 | 12.7 | 136 | 11 | 0.4 | 0.8 | 0.76 | 2.22 | 2.30* | 2.63 | 4.6 | 15.0 | |
| INDUSTRY AVERAGE | 8154.1 | 28 | 4 | 11.2 | 25.2 | 459 | 25 | 1.4 | 1.8 | 0.62 | 0.52 | 1.32 | 1.60 | 7.0 | 15.6 | |
| (A) EATING PLACES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6026.3 | 27 | 8 | 18.0 | 17.7 | 315 | 20 | 1.1 | 1.2 | 0.24 | 0.77 | 1.44 | 1.60 | 9.1 | 16.9 | |
| BRINKER INTERNATIONAL (6) | 1680.2 | 26 | 60 | 4.5 | 12.1 | 277 | 24 | 1.0 | 1.7 | 0.00 | 0.81 | 1.02* | 1.24 | 1.6 | 15.0 | |
| CKE RESTAURANTS (1) | 1150.7 | 24 | -36 | 64.6 | 12.9 | 210 | 17 | 0.7 | 0.5 | 0.33 | 1.07 | 1.74 | 2.16 | 2.8 | 30.0 | |
| CRACKER BARREL OLD COUNTRY STORE (7) | 1452.7 | 23 | -30 | 15.3 | 13.4 | 182 | 14 | 1.1 | 0.9 | 0.09 | 1.41 | 1.65* | 1.81 | 5.7 | 16.0 | |
| DARREN RESTAURANTS (5) | 2197.4 | 16 | 27 | -2.7 | 11.1 | 216 | 21 | 0.7 | 1.7 | 0.51 | 0.67 | 0.86 | 0.99 | 4.0 | 11.0 | |
| FOODMAKER (9) | 730.1 | 19 | 28 | NM | 49.5 | 533 | 11 | 0.6 | 0.5 | 0.00 | 0.89 | 1.77* | 1.37 | 1.5 | 20.0 | |
| HOTEL MARRIOTT SERVICES | 370.6 | 11 | -26 | NA | NM | NM | 18 | 0.3 | 0.8 | 0.00 | 0.57 | 0.64 | 0.79 | 2.5 | 21.0 | |
| MCDONALD'S | 47397.6 | 70 | 47 | 12.8 | 17.6 | 530 | 31 | 3.9 | 2.1 | 0.51 | 2.29 | 2.59 | 2.92 | 1.4 | 13.0 | |
| OUTBACK STEAKHOUSE | 1739.4 | 36 | 23 | 22.4 | 14.8 | 339 | 23 | 1.3 | 1.0 | 0.00 | 1.27 | 1.95 | 2.31 | 1.7 | 18.0 | |
| SHONEY'S | 82.2 | 2 | -48 | NM | NM | NM | NM | 0.1 | NM | 0.00 | -0.74 | -0.08 | 0.16 | 68.8 | 13.5 | |
| TRICON GLOBAL RESTAURANTS | 6999.8 | 46 | 57 | NA | NM | NM | NM | 0.8 | 1.3 | 0.00 | -0.73 | 2.53 | 2.62 | 7.6 | 13.8 | |
| WENDY'S INTERNATIONAL | 2489.1 | 20 | -17 | 9.1 | 10.1 | 231 | 24 | 1.3 | 1.2 | 1.20 | 0.97 | 1.12 | 1.25 | 2.4 | 15.0 | |
| (B) ENTERTAINMENT | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 15935.3 | 24 | -10 | 16.1 | 4.3 | 172 | 28 | 1.4 | 2.8 | 0.11 | 0.51 | 0.39 | 0.65 | 10.2 | 15.1 | |
| CIRCUS CIRCUS ENTERPRISES (1) | 1094.0 | 12 | -44 | -8.2 | 6.1 | 93 | 15 | 0.8 | 0.9 | 0.00 | 0.94 | 0.88 | 1.05 | 12.4 | 15.0 | |
| DISNEY (WALT) (9) | 66661.3 | 32 | -2 | 23.5b | 9.6 | 347 | 36 | 2.9 | 2.0 | 0.65 | 0.95 | 0.89* | 0.94 | 6.5 | 17.9 | |
| HARRAH'S ENTERTAINMENT | 1579.2 | 16 | -18 | 9.7 | 14.3 | 191 | 13 | 0.8 | 0.7 | 0.00 | 1.06 | 1.26 | 1.48 | 6.8 | 18.0 | |
| MIRAGE RESORTS | 2674.8 | 15 | -35 | 39.4 | 9.6 | 165 | 18 | 2.0 | 1.0 | 0.00 | 1.09 | 0.83 | 1.28 | 9.4 | 18.0 | |
| TRUMP HOTELS & CASINO RESORTS | 112.4 | 5 | -24 | NA | -16.9 | 37 | NM | 0.1 | NM | 0.00 | -1.85 | -1.92 | -1.90 | 3.7 | 5.0 | |
| VIACOM | 23490.1 | 67 | 61 | NA | 3.3 | 199 | 57 | 1.7 | 9.6 | 0.00 | 0.89 | 0.42 | 1.03 | 22.3 | 16.5 | |
| (C) HOTEL & MOTEL | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6401.7 | 26 | -21 | 15.2 | 10.7 | 224 | 22 | 0.8 | 1.0 | 1.08 | 1.09 | 1.36 | 1.55 | 3.3 | 18.0 | |
| HILTON HOTELS | 5671.8 | 22 | 27 | 15.2 | 7.0 | 168 | 23 | 1.0 | 1.0 | 1.47 | 0.94 | 1.27 | 1.44 | 4.2 | 18.0 | |
| MARRIOTT INTERNATIONAL | 7131.5 | 29 | -15 | NA | 14.5 | 279 | 21 | 0.7 | 1.1 | 0.68 | 1.23 | 1.44 | 1.65 | 2.4 | 18.0 | |
| (D) OTHER LEISURE | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6506.2 | 31 | 11 | 3.3 | 43.1 | 738 | 28 | 1.8 | 2.0 | 1.14 | 0.21 | 1.67 | 2.10 | 4.0 | 14.1 | |
| AMERICAN GREETINGS (2) | 2997.7 | 42 | 8 | 9.9 | 13.7 | 226 | 17 | 1.4 | 1.6 | 1.80 | 2.55 | 2.67 | 2.96 | 2.0 | 10.0 | |
| BRUNSWICK | 2174.2 | 22 | 27 | 27.8 | 12.8 | 155 | 12 | 0.6 | 0.8 | 2.27 | 1.51 | 2.21 | 2.38 | 2.6 | 12.0 | |
| CARNIVAL (11) | 20541.7 | 35 | 25 | 18.5 | 18.8 | 500 | 27 | 7.3 | 1.5 | 1.04 | 1.12 | 1.36 | 1.61 | 1.9 | 17.1 | |
| COLEMAN | 533.6 | 10 | -40 | NM | -3.6 | 199 | NM | 0.5 | 0.5 | 0.00 | -0.05 | 0.91 | 1.18 | 5.1 | 20.0 | |
| EASTMAN KODAK | 23530.5 | 73 | 20 | -73.2 | 9.6 | 601 | 65 | 1.7 | 1.6 | 2.42 | 0.01 | 4.44 | 5.18 | 3.5 | 10.0 | |
| HARLEY-DAVIDSON | 6408.4 | 42 | 54 | 23.1 | 20.2 | 661 | 33 | 3.3 | 1.7 | 0.38 | 1.13 | 1.38 | 1.66 | 1.2 | 18.0 | |
| HASBRO | 4606.8 | 35 | 12 | -8.8a | 5.3 | 262 | 51 | 1.5 | 1.5 | 0.91 | 1.02 | 1.69 | 2.03 | 3.4 | 14.0 | |
| IMATION | 661.4 | 16 | 2 | NM | -19.1 | 92 | NM | 0.3 | 4.1 | 0.00 | -4.54 | 0.49 | 1.19 | 10.9 | 8.0 | |
| MAITEL | 10155.5 | 35 | -7 | 44.5 | 23.9 | 529 | 22 | 2.1 | 1.3 | 0.92 | 0.94 | 1.82 | 2.10 | 3.8 | 15.0 | |
| MUSICLAND STORES | 606.2 | 17 | 132 | -20.1 | 460.1 | 5197 | 11 | 0.3 | 1.1 | 0.00 | 0.41 | 0.95 | 1.04 | 1.0 | 16.0 | |
| POLAROID | 942.8 | 22 | 56 | NM | -38.6 | 204 | NM | 0.5 | 6.8 | 2.79 | -2.81 | 0.30 | 1.89 | 10.1 | 10.5 | |
| ROYAL CARIBBEAN CRUISES | 4915.1 | 40 | 14 | 7.9 | 13.8 | 309 | 17 | 1.9 | 0.9 | 1.19 | 1.20 | 1.87 | 1.92 | 2.6 | 19.0 | |
| INDUSTRY AVERAGE | 4694.4 | 35 | -5 | 19.6 | 14.1 | 310 | 23 | 1.0 | 1.3 | 1.47 | 1.84 | 2.10 | 2.41 | 5.9 | 13.3 | |
| (A) GENERAL MANUFACTURING | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 5299.6 | 39 | -1 | 22.6 | 17.9 | 364 | 21 | 1.3 | 1.5 | 1.65 | 1.92 | 2.19 | 2.47 | 3.6 | 13.5 | |
| AERQUIP-VICKERS | 1017.9 | 36 | -26 | 76.6 | 21.5 | 176 | 8 | 0.5 | 0.9 | 2.42 | 3.51 | 4.21 | 4.09 | 7.1 | 10.0 | |
| CARLISLE | 1337.5 | 44 | 4 | 25.9 | 21.0 | 340 | 16 | 0.9 | 1.1 | 1.44 | 2.28 | 2.74 | 3.06 | 1.3 | 14.5 | |
| COLTEC INDUSTRIES | 1238.6 | 19 | -17 | NA | NM | NM | 11 | 0.8 | 0.8 | 0.00 | 1.42 | 1.67 | 1.86 | 3.2 | 14.8 | |
| CORNING | 9272.9 | 40 | 8 | NM | 22.0 | 660 | 30 | 2.6 | 1.6 | 1.79 | 1.72 | 1.51 | 1.77 | 1.8 | 17.0 | |
| CRANI | 2217.5 | 32 | 12 | 23.0 | 21.8 | 364 | 17 | 1.0 | 1.4 | 0.83 | 1.63 | 1.97 | 2.27 | 2.6 | 12.0 | |



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|--------------------------------------|------------------------|--------------------|---------------------|---------------------------|------------------|--------------------------|-----------|-------------------|--------------------|-------------|-------------|--------------------------|-----------------------------|-------------|-------------------------|
| | | | | | | | | | | | | | 1/8/E/S 1999 CONSENSUS | VARIATION % | LONG-TERM GROWTH RATE % |
| EXIDE (3) | 372.2 | 17 | -33 | NA | 5.0 | 130 | 28 | 0.2 | 2.7 | 0.46 | 0.87 | 0.47 | 0.87 | 16.1 | 14.0 |
| FIRST BRANDS (6) | 1460.8 | 37 | 39 | NA | 14.0 | 375 | 28 | 1.2 | 1.9 | 1.07 | 1.22 | 1.29* | 1.62 | 3.7 | 15.5 |
| FORTUNE BRANDS | 5825.1 | 34 | -8 | -20.1 | 4.2 | 145 | 35 | 1.2 | 1.7 | 2.58 | 0.23 | 1.67 | 1.87 | 1.1 | 12.2 |
| HARSCO | 1439.1 | 32 | 26 | 30.8a | 15.2 | 193 | 13 | 0.8 | 0.9 | 2.72 | 2.04 | 2.35 | 2.61 | 3.4 | 15.0 |
| HILLENBRAND INDUSTRIES (11) | 3819.3 | 57 | 11 | 5.2 | 19.3 | 419 | 22 | 2.0 | 1.4 | 1.27 | 2.28 | 2.65 | 2.99 | 1.7 | 15.0 |
| ILLINOIS TOOL WORKS | 15894.8 | 64 | 6 | 26.8 | 20.5 | 503 | 25 | 2.9 | 1.9 | 0.94 | 2.33 | 2.63 | 2.97 | 2.0 | 13.0 |
| JOHNSON CONTROLS (9) | 4901.3 | 58 | 21 | 18.0b | 17.8 | 295 | 16 | 0.4 | 1.3 | 1.59 | 2.37 | 3.63* | 4.21 | 0.7 | 12.0 |
| MINNESOTA MINING & MFG. | 32308.3 | 81 | -2 | 18.5 | 22.6 | 549 | 25 | 2.2 | 1.9 | 2.73 | 5.06 | 3.87 | 4.28 | 2.1 | 10.9 |
| NEWELL | 7195.1 | 44 | 4 | 14.9 | 22.7 | 382 | 17 | 2.0 | 1.4 | 1.63 | 1.82 | 2.05 | 2.30 | 4.3 | 15.0 |
| PARKER HANNIFIN (6) | 3785.0 | 35 | -24 | 56.9 | 18.6 | 217 | 12 | 0.8 | 1.1 | 1.73 | 2.44 | 2.88* | 3.07 | 2.3 | 10.8 |
| RUBBERMAID | 4958.7 | 33 | 32 | -7.9 | 10.5 | 469 | 45 | 2.0 | 2.6 | 1.94 | 0.95 | 1.00 | 1.26 | 6.3 | 12.5 |
| TELEFLEX | 1590.1 | 43 | 13 | 17.9 | 15.3 | 311 | 21 | 1.2 | 1.2 | 1.08 | 1.86 | 2.13 | 2.52 | 0.8 | 16.0 |
| TOWER AUTOMOTIVE | 1051.1 | 23 | 8 | 29.9 | 9.3 | 182 | 15 | 0.6 | 0.9 | 0.00 | 1.14 | 1.73 | 1.95 | 2.7 | 15.0 |
| TUPPERWARE | 1006.5 | 17 | -37 | NA | 40.3 | 851 | 22 | 0.9 | 1.3 | 5.05 | 1.32 | 1.14 | 1.33 | 5.8 | 12.0 |
| (B) MACHINE & HAND TOOLS | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2480.2 | 33 | -3 | 28.5 | 12.7 | 375 | 33 | 1.1 | 1.5 | 1.73 | 1.69 | 1.92 | 2.40 | 3.7 | 13.5 |
| APPLIED POWER (8) | 1376.1 | 36 | 3 | -1.7 | 7.8 | 402 | 54 | 1.1 | 3.2 | 0.17 | 1.47 | 0.66* | 2.35 | 3.4 | 17.0 |
| BLACK & DECKER | 4761.3 | 54 | 39 | 39.7 | NM | 920 | NM | 1.0 | 1.4 | 0.89 | 2.35 | 2.64 | 3.18 | 2.2 | 15.0 |
| DANAHER | 6158.5 | 46 | 45 | 33.0 | 13.1 | 479 | 36 | 2.3 | 1.9 | 0.13 | 1.29 | 1.53 | 1.77 | 2.8 | 16.0 |
| KENNAMETAL (6) | 638.5 | 21 | -59 | 55.2 | 8.3 | 87 | 10 | 0.3 | 0.7 | 3.18 | 2.69 | 2.58* | 2.43 | 8.6 | 12.0 |
| LINCOLN ELECTRIC HOLDINGS | 1158.3 | 24 | 31 | NM | 19.4 | 243 | 13 | 1.0 | 1.0 | 1.70 | 1.73 | 1.89 | 2.06 | 2.4 | 12.0 |
| MILACRON | 791.8 | 20 | -22 | NM | 16.3 | 167 | 10 | 0.5 | 0.9 | 2.37 | 2.01 | 1.94 | 2.30 | 3.9 | 12.0 |
| SNAP-ON | 2243.2 | 34 | -22 | 16.5 | 3.2 | 290 | 89 | 1.2 | 1.5 | 2.59 | 2.44 | 1.94 | 2.84 | 4.3 | 12.0 |
| STANLEY WORKS | 2714.1 | 31 | 35 | NM | 21.1 | 413 | 20 | 1.0 | 1.2 | 2.81 | -0.47 | 2.18 | 2.29 | 2.2 | 12.0 |
| (C) SPECIAL MACHINERY | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6049.1 | 33 | -16 | 19.8 | 12.3 | 244 | 24 | 0.9 | 1.2 | 1.40 | 1.95 | 2.20 | 2.50 | 10.0 | 13.0 |
| AGCO | 487.5 | 8 | -72 | NA | 13.1 | 48 | 4 | 0.2 | 0.6 | 0.49 | 2.74 | 1.39 | 0.80 | 21.3 | 10.0 |
| APPLIED MATERIALS (10) | 14242.8 | 39 | 29 | 44.8b | 9.3 | 456 | 52 | 3.5 | 2.0 | 0.00 | 1.32 | 0.76* | 0.62 | 24.6 | 25.0 |
| BRIGGS & STRATTON (6) | 1182.8 | 50 | 4 | -5.2 | 25.9 | 394 | 16 | 0.9 | 2.0 | 2.30 | 2.15 | 2.85* | 3.38 | 4.4 | 9.0 |
| CASE | 1766.4 | 24 | -60 | NA | 15.5 | 76 | 5 | 0.3 | 0.8 | 0.83 | 5.11 | 3.02 | 2.03 | 6.9 | 10.0 |
| CATERPILLAR | 17732.8 | 49 | 2 | 27.5 | 32.2 | 343 | 11 | 0.9 | 1.1 | 2.43 | 4.37 | 4.32 | 4.22 | 9.2 | 10.0 |
| CUMMINS ENGINE | 1421.9 | 37 | 37 | -3.3a | 1.1 | 110 | 103 | 0.2 | 1.0 | 2.96 | 5.48 | 3.56 | 3.66 | 14.1 | 10.0 |
| DEERE (10) | 8333.1 | 35 | -40 | 47.4b | 24.5 | 200 | 8 | 0.6 | 0.8 | 2.52 | 3.74 | 4.16* | 3.53 | 9.6 | 10.3 |
| DOVER | 7926.5 | 36 | -1 | NA | 20.0 | 413 | 21 | 1.6 | 1.6 | 1.18 | 1.79 | 1.73 | 1.96 | 3.6 | 13.0 |
| FLOWERVE | 681.9 | 18 | -36 | 0.8a | 12.4 | 195 | 17 | 0.6 | 0.8 | 0.79 | 1.26 | 1.82 | 1.78 | 5.6 | 12.0 |
| FMC | 1922.9 | 58 | -14 | NA | -1.5 | 253 | NM | 0.4 | 1.2 | 0.00 | -0.67 | 5.24 | 5.89 | 2.9 | 9.0 |
| HARNISCHFEGER INDUSTRIES (10) | 463.7 | 10 | -72 | NM | -13.6 | 66 | NM | 0.2 | NM | 4.00 | 3.20 | -3.75* | 0.89 | 50.6 | 10.0 |
| INGERSOLL-RAND | 7707.4 | 47 | 16 | 22.3 | 17.8 | 302 | 17 | 0.9 | 1.3 | 1.28 | 2.31 | 3.08 | 3.40 | 2.4 | 12.0 |
| ITT INDUSTRIES | 3912.3 | 36 | 15 | NA | NA | 202 | 30 | 0.7 | 1.4 | 1.67 | 0.94 | 2.23 | 2.48 | 2.4 | 11.5 |
| McDERMOTT INTERNATIONAL (3) | 1579.5 | 27 | -27 | 23.8 | 28.8 | 192 | 7 | 0.5 | 0.8 | 0.75 | 3.48 | 2.35 | 2.13 | 5.6 | 15.0 |
| PENTAIR | 1447.3 | 38 | 5 | NA | 14.5 | 230 | 16 | 0.7 | 0.9 | 1.59 | 2.11 | 2.68 | 3.10 | 1.8 | 15.0 |
| TIMKEN | 1195.7 | 19 | -44 | NM | 14.0 | 112 | 8 | 0.4 | 1.0 | 3.74 | 2.69 | 1.99 | 1.96 | 16.3 | 10.0 |
| TYCO INTERNATIONAL (9) | 38202.9 | 66 | -46 | NA | 20.5 | 666 | 33 | 3.1 | 1.7 | 0.15 | 1.34 | 2.02* | 2.76 | 1.8 | 19.5 |
| U.S. FILTER (3) | 3799.3 | 22 | -25 | NM | -17.5 | 242 | NM | 0.9 | 0.8 | 0.00 | -3.13 | 1.44 | 1.60 | 3.1 | 20.0 |
| UNOVA | 926.5 | 17 | 3 | NA | 3.8 | 143 | 38 | 0.7 | 1.1 | 0.00 | -3.17 | 0.94 | 1.30 | 3.1 | 16.0 |
| (D) TEXTILES | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 1440.2 | 26 | 12 | -2.8 | 9.5 | 262 | 16 | 0.7 | 1.1 | 0.81 | 1.46 | 1.77 | 1.92 | 3.2 | 13.6 |
| BURLINGTON INDUSTRIES (9) | 667.8 | 11 | -22 | -1.0b | 11.5 | 95 | 8 | 0.3 | 1.0 | 0.00 | 0.95 | 1.32* | 1.17 | 2.6 | 8.0 |
| MOHAWK INDUSTRIES | 1954.4 | 37 | 70 | 11.8 | 19.9 | 401 | 20 | 0.9 | 1.4 | 0.00 | 1.30 | 2.01 | 2.26 | 3.5 | 13.5 |
| SHAW INDUSTRIES | 2437.9 | 20 | 74 | -28.0a | -8.4 | 533 | NM | 0.7 | 1.4 | 1.48 | 0.22 | 0.98 | 1.35 | 3.7 | 15.0 |
| SPRINGS INDUSTRIES | 694.8 | 39 | -25 | 6.3 | 5.5 | 97 | 19 | 0.3 | 1.4 | 3.39 | 3.34 | 2.70 | 3.38 | 6.2 | 10.0 |
| UNIFI | 1178.3 | 19 | -53 | NA | 18.9 | 181 | 10 | 0.9 | 0.6 | 0.00 | 1.81 | 2.08* | 1.56 | 1.3 | 15.0 |
| WESTPOINT STEVENS | 1707.1 | 30 | 27 | NA | NM | NM | 21 | 1.0 | 1.0 | 0.00 | 1.11 | 1.50 | 1.79 | 1.7 | 20.0 |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 1823.9 | 23 | -17 | 34.3 | 13.1 | 138 | 14 | 0.5 | 1.4 | 1.95 | 2.23 | 1.63 | 1.72 | 48.4 | 10.8 |
| (A) ALUMINUM | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 5895.6 | 45 | -10 | 290.7 | 18.8 | 240 | 15 | 0.6 | 1.5 | 1.36 | 2.34 | 2.98 | 3.67 | 37.5 | 9.8 |
| ALUMINUM CO. OF AMERICA | 13630.2 | 74 | 6 | 290.7 | 14.5 | 236 | 15 | 0.9 | 1.7 | 1.52 | 4.62 | 4.81 | 5.55 | 17.8 | 9.0 |
| KAISER ALUMINUM | 519.4 | 7 | -26 | NM | 34.0 | 329 | 10 | 0.2 | 1.1 | 0.00 | 0.57 | 0.51 | 0.68 | 73.5 | 12.0 |
| REYNOLDS METALS | 3537.0 | 29 | -9 | NM | 8.0 | 157 | 21 | 0.6 | 1.8 | 2.55 | 1.84 | 3.62 | 4.79 | 21.1 | 8.5 |
| (B) STEEL | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 911.3 | 17 | -22 | 1.6 | 14.0 | 101 | 10 | 0.3 | 1.2 | 1.85 | 2.23 | 1.76 | 1.70 | 53.9 | 10.4 |
| AK STEEL HOLDING | 1131.3 | 19 | 8 | -20.4a | 12.5 | 127 | 10 | 0.5 | 1.2 | 2.61 | 2.43 | 1.61 | 1.74 | 21.8 | 10.0 |
| ARMCO | 424.9 | 4 | -20 | NM | 52.2 | NM | 5 | 0.2 | 0.9 | 0.00 | 0.55 | 0.74 | 0.88 | 18.2 | 6.0 |
| BETHLEHEM STEEL | 1072.3 | 8 | -5 | NM | 9.4 | 71 | 7 | 0.2 | 1.5 | 0.00 | 2.03 | 1.12 | 0.54 | 124.1 | 5.0 |
| CARPENTER TECHNOLOGY (6) | 784.9 | 35 | -27 | 15.0 | 12.1 | 124 | 10 | 0.7 | 0.6 | 3.74 | 3.16 | 3.84* | 3.27 | 4.5 | 15.0 |
| COMMERCIAL METALS (8) | 368.8 | 25 | -20 | 14.7b | 11.2 | 97 | 9 | 0.2 | 0.9 | 2.05 | 2.54 | 2.82* | 3.15 | 13.0 | 10.0 |
| INLAND STEEL INDUSTRIES | 406.5 | 18 | 7 | NM | 8.3 | 66 | 18 | 0.1 | 1.6 | 1.09 | 2.13 | 1.90 | 2.17 | 24.7 | 6.0 |



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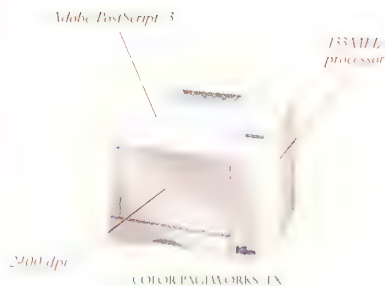
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| COMPANY | MARKET
VALUE
(\$ MIL.) | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
ON
EQUITY | PRICE AS
% OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1999 ESTIMATES FROM ANALYSTS | | | |
|-----------------------------------|------------------------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|------------------------------|------------------------|---------------------|----------------------------------|
| | | | | | | | | | | | | 1998
ANALYST
EST | 1998
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% |
| AT&T | 555.5 | 6 | -44 | NA | 4.2 | 32 | 8 | 0.1 | 2.1 | 2.18 | 0.37 | 0.22 | 0.23 | 160.9 | 11.9 |
| NATIONAL STEEL | 316.5 | 7 | -37 | NA | 12.5 | 35 | 3 | 0.1 | 1.0 | 3.83 | 4.76 | 0.95 | 0.82 | 108.5 | 7.5 |
| NUCOR | 3694.5 | 42 | 13 | 23.9 | 13.7 | 182 | 13 | 0.9 | 1.0 | 1.14 | 3.35 | 2.90 | 2.82 | 9.9 | 15.0 |
| ROUGE INDUSTRIES | 181.9 | 8 | -32 | -25.5 | 2.5 | 40 | 16 | 0.1 | 1.1 | 1.46 | 1.02 | 0.73 | 0.56 | 44.6 | 10.0 |
| TEXAS INDUSTRIES (5) | 614.0 | 29 | -36 | NA | 18.1 | 106 | 6 | 0.5 | 0.3 | 1.04 | 4.69 | 4.31 | 4.32 | 1.4 | 20.0 |
| USX-U.S. STEEL GROUP | 2158.8 | 24 | -22 | NA | 21.7 | 106 | 5 | 0.3 | 0.9 | 4.09 | 4.88 | 3.23 | 2.84 | 26.8 | 8.0 |
| WALTER INDUSTRIES (5) | 754.6 | 14 | -31 | NM | 15.2 | 213 | 14 | 0.4 | 1.3 | 0.00 | 1.08 | 1.08 | 1.18 | 6.8 | 10.5 |
| WEIRTON STEEL | 77.4 | 2 | -30 | NA | 6.4 | 58 | 8 | 0.1 | 3.1 | 0.00 | -0.42 | 0.10 | -0.19 | 231.6 | 6.0 |
| WORTHINGTON INDUSTRIES (5) | 1127.0 | 12 | -26 | NA | 10.7 | 156 | 15 | 0.7 | 0.9 | 4.60 | 0.85 | 0.89 | 1.16 | 11.2 | 15.0 |
| (C) OTHER METALS | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2034.7 | 25 | -11 | 15.8 | 8.5 | 174 | 24 | 0.9 | 1.9 | 2.40 | 2.18 | 0.77 | 0.94 | 41.4 | 12.0 |
| ASARCO | 768.4 | 19 | -14 | NM | -3.6 | 48 | NM | 0.3 | NM | 2.07 | 3.42 | -1.52 | -1.05 | 84.8 | 6.3 |
| CYPRUS AMAX MINERALS | 1037.0 | 11 | -26 | -26.5 | -5.8 | 46 | NM | 0.4 | NM | 7.03 | 0.54 | -0.53 | -0.50 | 66.0 | 10.0 |
| ENGELHARD | 2766.6 | 19 | 11 | 31.6 | 7.8 | 323 | 42 | 0.7 | 1.2 | 2.07 | 0.33 | 1.28 | 1.42 | 2.8 | 13.0 |
| ESSEX INTERNATIONAL | 896.9 | 32 | 9 | NA | 25.2 | 300 | 13 | 0.6 | 0.9 | 0.00 | 2.83 | 2.61 | 2.77 | 4.7 | 13.5 |
| FREEPORT-McMORAN COPPER & GOLD | 2162.5 | 13 | -17 | 60.4 | 19.9 | NM | 20 | 1.3 | 0.9 | 1.53 | 1.06 | 0.69 | 0.68 | 29.4 | 21.0 |
| NEWMONT MINING | 3323.4 | 20 | -32 | -12.2 | 6.2 | 202 | 31 | 2.2 | 3.2 | 0.60 | 0.44 | 0.48 | 0.51 | 56.9 | 13.0 |
| PHELPS DODGE | 3287.9 | 57 | -9 | 25.8 | 10.1 | 125 | 13 | 1.0 | 3.4 | 3.53 | 6.63 | 2.35 | 2.77 | 45.1 | 7.0 |
| 17 NON-FINANCIAL | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 12588.7 | 55 | 5 | 16.0 | 16.0 | 273 | 19 | 1.7 | 1.4 | 1.42 | 3.10 | 3.31 | 3.72 | 4.6 | 12.9 |
| (A) FINANCIAL SERVICES | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 18496.1 | 51 | 12 | 14.4 | 23.0 | 424 | 21 | 2.0 | 1.3 | 1.24 | 2.59 | 2.94 | 3.20 | 6.3 | 13.7 |
| ADVANTA | 271.6 | 10 | -60 | -7.7 | 86.4 | 49 | 1 | 0.3 | 0.5 | 2.41 | 1.50 | 1.28 | 1.53 | 17.6 | 16.0 |
| AMERICAN EXPRESS | 45258.5 | 100 | 12 | 7.2 | 22.4 | 481 | 22 | 2.3 | 1.5 | 0.90 | 4.15 | 4.74 | 5.37 | 1.1 | 14.0 |
| ASSOCIATES FIRST CAPITAL | 27013.3 | 78 | 10 | 19.6a | 16.8 | 388 | 23 | 3.0 | 1.3 | 0.56 | 2.97 | 3.50 | 4.08 | 1.0 | 17.0 |
| BEAR STEARNS (6) | 4643.5 | 41 | -14 | 16.5 | 12.2 | 132 | 11 | 0.6 | 0.7 | 1.46 | 4.20 | 4.60* | 2.56 | 12.9 | 12.5 |
| BLOCK (H&R) (4) | 4649.4 | 45 | 0 | 14.4 | 15.9 | 409 | 28 | 3.4 | 1.5 | 2.23 | 1.62 | 2.02 | 2.39 | 4.6 | 15.0 |
| CAPITAL ONE FINANCIAL | 7212.8 | 110 | 103 | 14.5 | 22.3 | 617 | 29 | 3.1 | 1.4 | 0.29 | 2.80 | 4.07 | 5.20 | 5.2 | 20.0 |
| CHICAGO TITLE | 1024.2 | 47 | NA | NA | 17.4 | 230 | 13 | 0.6 | 0.9 | 2.91 | 2.54 | 4.93 | 5.45 | 10.6 | 11.0 |
| CIT GROUP | 4561.3 | 28 | -13 | NA | 12.2 | 173 | 14 | 2.1 | 1.0 | 1.43 | 1.95 | 2.08 | 2.36 | 2.1 | 13.0 |
| CITIGROUP | 114166.3 | 50 | -7 | 7.4 | 11.9 | 277 | 22 | 1.5 | 1.3 | 1.43 | 2.54 | 2.74 | 3.50 | 4.9 | 14.0 |
| COUNTRYWIDE CREDIT INDUSTRIES (2) | 5517.4 | 50 | 15 | 12.3 | 15.0 | 235 | 16 | 1.7 | 1.1 | 0.65 | 3.09 | 3.22 | 3.64 | 1.4 | 14.3 |
| DONALDSON, LUFKIN & JENRETTE | 4716.3 | 40 | 1 | 17.9 | 13.4 | 218 | 14 | 0.6 | 1.4 | 0.62 | 3.16 | 2.68 | 2.78 | 12.6 | 11.0 |
| DUN & BRADSTREET | 5044.6 | 30 | -2 | 18.5 | NM | NM | 22 | 2.7 | 2.3 | 2.45 | 1.27 | 1.57 | 1.72 | 1.7 | 8.5 |
| EDWARDS (A.G.) (2) | 3513.5 | 37 | -6 | 12.6 | 19.4 | 232 | 12 | 1.6 | 1.8 | 1.51 | 2.75 | 2.94 | 3.01 | 7.3 | 7.2 |
| EQUIFAX | 5870.6 | 42 | 17 | NA | 47.0 | 1473 | 32 | 3.8 | 1.6 | 0.87 | 1.26 | 1.48 | 1.75 | 2.3 | 17.7 |
| FANNIE MAE | 74540.6 | 73 | 27 | 11.3 | 22.1 | 544 | 23 | 2.4 | 1.7 | 1.32 | 2.84 | 3.24 | 3.66 | 0.8 | 13.0 |
| FIRST AMERICAN FINANCIAL | 1785.3 | 31 | 87 | 50.3a | 25.9 | 274 | 10 | 0.7 | 1.0 | 0.78 | 1.21 | 2.82 | 2.75 | 9.1 | 10.5 |
| FRANKLIN RESOURCES (9) | 10813.5 | 43 | -2 | NA | 22.4 | 484 | 22 | 4.2 | 1.4 | 0.47 | 1.71 | 1.98* | 1.99 | 7.0 | 15.5 |
| FREDDIE MAC | 41056.0 | 61 | 44 | 12.6a | 16.1 | 692 | 28 | 2.5 | 1.8 | 0.79 | 1.88 | 2.28 | 2.69 | 1.9 | 15.0 |
| HELLER FINANCIAL | 2358.8 | 26 | NA | NA | 9.0 | 156 | NA | 1.7 | 0.9 | 0.34 | NA | 1.92 | 2.18 | 2.3 | 15.0 |
| HOUSEHOLD INTERNATIONAL | 18878.7 | 39 | -8 | 22.0 | 6.1 | 318 | 40 | 2.4 | 1.0 | 1.53 | 2.17 | 2.30 | 3.00 | 3.7 | 17.0 |
| LEHMAN BROTHERS HOLDINGS (11) | 5833.6 | 50 | -2 | NM | 14.0 | 133 | 8 | 0.3 | 1.0 | 0.60 | 4.71 | 5.23 | 4.74 | 14.6 | 10.0 |
| MARSH & MCLENNAN | 14966.3 | 58 | 17 | 2.0 | 15.7 | 418 | 28 | 2.2 | 1.7 | 2.75 | 1.59 | 2.91 | 3.31 | 1.5 | 12.0 |
| MERRILL LYNCH | 26949.7 | 75 | 3 | 14.2 | 13.7 | 288 | 22 | 0.8 | 1.7 | 1.28 | 4.83 | 3.56 | 4.33 | 12.2 | 12.1 |
| MORGAN STANLEY DEAN WITTER (11) | 40576.8 | 70 | 18 | 17.4 | 21.6 | 311 | 14 | 1.3 | 1.2 | 1.15 | 4.15 | 4.56 | 4.94 | 9.9 | 13.0 |
| PAINEWEBBER GROUP | 5837.3 | 41 | 18 | 4.7 | 17.0 | 258 | 15 | 0.8 | 1.4 | 1.08 | 2.56 | 2.66 | 2.72 | 11.0 | 11.0 |
| SCHWAB (CHARLES) | 15042.9 | 56 | 34 | 21.0 | 23.4 | 1152 | 51 | 4.7 | 2.3 | 0.30 | 0.99 | 1.20 | 1.44 | 4.2 | 20.0 |
| SLM HOLDING | 7291.2 | 44 | 11 | NA | 78.7 | 1094 | 14 | 2.3 | 1.1 | 1.27 | 2.80 | 2.88 | 3.36 | 5.7 | 14.0 |
| (B) INSURANCE | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 9748.5 | 59 | 4 | 17.4 | 12.0 | 192 | 19 | 1.6 | 1.4 | 1.57 | 3.53 | 3.55 | 4.06 | 3.6 | 12.6 |
| AETNA | 11051.6 | 77 | 10 | NM | 7.6 | 106 | 13 | 0.6 | 1.4 | 1.04 | 5.60 | 3.76 | 4.49 | 3.8 | 15.0 |
| AFLAC | 9770.1 | 37 | 44 | 28.6 | 13.1 | 274 | 22 | 1.4 | 1.5 | 0.71 | 2.08 | 1.54 | 1.86 | 3.8 | 16.0 |
| ALLMERICA FINANCIAL | 3333.4 | 55 | 11 | NA | 9.3 | 134 | 14 | 1.0 | 1.3 | 0.36 | 3.82 | 3.48 | 4.61 | 4.1 | 12.0 |
| ALLSTATE | 33496.5 | 41 | -10 | NA | 20.5 | 202 | 10 | 1.3 | 1.1 | 1.33 | 3.56 | 3.07 | 3.30 | 2.4 | 11.7 |
| AMERICAN BANKERS INSURANCE GROUP | 1942.6 | 45 | -1 | 14.5 | 3.3 | 272 | 53 | 1.2 | 1.4 | 1.06 | 2.45 | 2.48 | 2.89 | 3.1 | 13.0 |
| AMERICAN FINANCIAL GROUP | 2399.9 | 39 | -2 | -42.4 | 11.5 | 134 | 50 | 0.6 | 1.1 | 2.54 | 0.76 | 2.55 | 2.98 | 2.0 | 14.5 |
| AMERICAN GENERAL | 17773.8 | 70 | 30 | NA | 10.4 | 189 | 18 | 1.8 | 1.6 | 2.13 | 2.19 | 4.01 | 4.53 | 1.3 | 11.0 |
| AMERICAN INTERNATIONAL GROUP | 98696.1 | 94 | 30 | 15.9a | 14.1 | 382 | 27 | 3.3 | 1.9 | 0.24 | 3.15 | 3.49 | 3.97 | 1.3 | 14.0 |
| AMERICAN NATIONAL INSURANCE | 2217.6 | 84 | -10 | 7.6 | 8.1 | 79 | 10 | 1.3 | NA | 3.20 | 9.38 | 7.35 | 8.10 | 2.6 | NA |
| AON | 9800.7 | 58 | -2 | 7.5 | 16.8 | 327 | 19 | 1.6 | 1.5 | 1.94 | 1.68 | 3.11 | 3.47 | 3.7 | 12.0 |
| BERKLEY (W.R.) | 929.7 | 34 | -24 | NA | 8.4 | 100 | 13 | 0.6 | 1.3 | 1.43 | 3.02 | 2.19 | 2.57 | 3.9 | 12.0 |
| CHUBB | 11415.2 | 70 | -7 | NA | 13.4 | 206 | 16 | 1.7 | 1.4 | 1.77 | 4.39 | 4.08 | 4.84 | 3.4 | 12.0 |
| CIGNA | 16067.1 | 78 | 35 | 45.7 | 15.9 | 197 | 13 | 0.8 | 1.6 | 1.47 | 4.88 | 4.87 | 5.36 | 2.4 | 10.0 |
| FINANCIAL | 6522.3 | 39 | -17 | 10.4 | 5.5 | 133 | 25 | 3.2 | 3.2 | 1.57 | 1.77 | 1.37 | 1.69 | 4.1 | 9.0 |
| GENERAL | 7853.3 | 43 | 0 | 38.2 | 7.8 | 89 | 11 | 0.5 | 2.1 | 0.00 | 5.17 | 2.14 | 2.19 | 15.1 | 9.5 |
| GROUP | 10368.4 | 33 | -27 | NA | 7.9 | 204 | 22 | 1.4 | 0.6 | 1.69 | 2.67 | 3.26 | 4.05 | 3.5 | 16.0 |
| EQUITAS | 12327.8 | 55 | 11 | 27.7 | 12.5 | 213 | 18 | 1.1 | 1.2 | 0.36 | 2.86 | 3.26 | 3.70 | 3.2 | 14.0 |
| EVEREST REINSURANCE HOLDINGS | 1889.4 | 38 | -9 | 5.0 | 11.2 | 130 | 12 | 1.4 | 0.9 | 0.53 | 3.05 | 3.26 | 3.58 | 1.1 | 13.0 |

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| COMPANY | MARKET
VALUE
(\$ MIL) | RECENT
SHARE
PRICE | PRICE
CHANGE | EARNINGS
PER SHARE
1993-97 | RETURN
ON
EQUITY | PRICE AS
A % OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P/E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | I/B/E/S
1998
ANALYST
EST | 1999 ESTIMATES FROM ANALYSTS | | |
|---|-----------------------------|--------------------------|-----------------|----------------------------------|------------------------|-------------------------------------|--------------|--------------------------|-----------------------------|-------------|----------------|-----------------------------------|------------------------------|---------------------|----------------------------------|
| | | | | | | | | | | | | | I/B/E/S
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% |
| LOANS | 17673.6 | 234 | 10 | 10.4 | 13.7 | 209 | 16 | 2.2 | 1.5 | 1.01 | 11.76 | 12.89 | 14.09 | 1.9 | 11.9 |
| HARTFORD FINANCIAL SERVICES GROUP | 12655.8 | 18 | 18 | 25.2 | 15.2 | 185 | 14 | 0.9 | 1.3 | 1.60 | 5.58 | 3.42 | 3.86 | 1.8 | 12.0 |
| HARTFORD LIFE | 7677.0 | 55 | 21 | NA | 15.4 | 323 | 21 | 1.4 | 1.4 | 0.66 | 2.28 | 2.70 | 3.08 | 2.3 | 15.0 |
| JEFFERSON-PILOT | 7233.8 | 68 | 31 | 17.1 | 13.3 | 239 | 18 | 2.7 | 1.7 | 1.73 | 3.47 | 3.31 | 3.68 | 1.6 | 12.0 |
| LIBERTY FINANCIAL | 1336.5 | 29 | 23 | 34.1 | 9.7 | 105 | 11 | 1.1 | 0.9 | 1.38 | 2.77 | 2.81 | 3.06 | 3.9 | 12.0 |
| LINCOLN NATIONAL | 8455.2 | 14 | 7 | NA | 4.5 | 153 | 34 | 1.5 | 1.5 | 2.49 | 0.21 | 5.07 | 5.70 | 1.9 | 11.0 |
| LOEWS | 11369.1 | 11 | -6 | 10.5 | 10.2 | 115 | 11 | 0.5 | NA | 1.00 | 6.90 | 9.05 | 10.35 | 2.0 | NA |
| NATIONWIDE FINANCIAL SERVICES | 6184.1 | 48 | 33 | NA | 14.2 | 271 | 19 | 2.6 | 1.2 | 0.67 | 2.14 | 2.47 | 2.81 | 1.8 | 16.0 |
| OHIO CASUALTY | 1308.4 | 41 | -9 | 14.3 | 8.2 | 163 | 13 | 0.9 | 1.7 | 4.35 | 3.81 | 2.41 | 2.94 | 5.4 | 10.0 |
| OLD REPUBLIC INTERNATIONAL | 2906.0 | 21 | 14 | 12.7 | 13.5 | 126 | 10 | 1.4 | 0.9 | 1.88 | 2.10 | 2.12 | 2.32 | 4.3 | 10.6 |
| ORION CAPITAL | 981.8 | 36 | -22 | 29.8a | 16.7 | 137 | 9 | 0.6 | 1.1 | 1.99 | 4.15 | 2.77 | 3.53 | 2.6 | 12.0 |
| PROGRESSIVE | 10742.3 | 148 | 24 | NA | 20.0 | 445 | 23 | 2.0 | 1.6 | 0.18 | 5.31 | 6.04 | 6.46 | 5.6 | 15.0 |
| PROTECTIVE LIFE | 2509.0 | 39 | 30 | 14.8 | 13.0 | 259 | 20 | 1.9 | 1.3 | 1.13 | 1.78 | 2.00 | 2.30 | 1.3 | 14.5 |
| PROVIDENT | 5198.5 | 38 | 0 | NA | 8.6 | 151 | 18 | 1.3 | 1.2 | 1.04 | 1.84 | 2.19 | 2.56 | 2.3 | 15.0 |
| RELIANCE GROUP HOLDINGS | 1617.3 | 14 | -1 | NA | 29.1 | 132 | 5 | 0.5 | 1.0 | 2.30 | 1.47 | 1.14 | 1.36 | 2.2 | 12.0 |
| RELIASTAR FINANCIAL | 4300.5 | 47 | 14 | NA | 11.4 | 187 | 16 | 1.5 | 1.2 | 1.57 | 2.55 | 2.92 | 3.33 | 1.8 | 13.0 |
| SAFECO | 5852.4 | 43 | -12 | 10.0a | 6.0 | 105 | 18 | 0.9 | 1.8 | 3.26 | 3.31 | 2.35 | 3.31 | 5.1 | 10.0 |
| ST. PAUL | 8349.7 | 35 | -14 | NA | 2.1 | 127 | 44 | 1.0 | 2.2 | 2.84 | 4.20 | 1.62 | 2.81 | 5.7 | 10.0 |
| SUNAMERICA (9) | 15502.7 | 79 | 85 | 31.0ab | 16.8 | 565 | 34 | 10.9 | 2.3 | 0.76 | 1.81 | 2.34* | 3.13 | 2.7 | 15.0 |
| TIG HOLDINGS | 721.7 | 14 | -58 | NA | -4.1 | 62 | NM | 0.4 | 0.7 | 4.27 | 0.94 | 2.03 | 1.74 | 19.0 | 10.0 |
| TORCHMARK | 5330.1 | 38 | -10 | 10.5 | 11.0 | 211 | 19 | 2.4 | 1.1 | 1.37 | 2.39 | 2.70 | 2.83 | 9.4 | 13.0 |
| TRANSAMERICA | 6727.7 | 10 | 0 | 17.8 | 11.8 | 129 | 11 | 1.1 | 1.3 | 1.88 | 7.87 | 7.23 | 8.03 | 1.0 | 11.0 |
| TRANSATLANTIC HOLDINGS | 2633.6 | 76 | 6 | 20.7 | 16.5 | 173 | 11 | 1.6 | 1.4 | 0.58 | 5.34 | 4.87 | 5.56 | 2.2 | 11.5 |
| TRAVELERS PROPERTY CASUALTY | 13552.4 | 34 | -22 | NA | 15.8 | 150 | 10 | 1.3 | 0.8 | 1.16 | 3.12 | 3.13 | 3.44 | 2.6 | 13.5 |
| UNITRIN | 2803.5 | 71 | 9 | 14.5 | 25.5 | 140 | 6 | 1.4 | NA | 3.68 | 3.11 | 4.57 | 5.06 | 2.9 | NA |
| UNUM | 7455.4 | 54 | 1 | 36.6a | 13.6 | 271 | 20 | 1.7 | 1.4 | 1.10 | 2.59 | 2.84 | 3.25 | 1.6 | 14.0 |
| (C) SAVINGS & LOAN | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 5682.3 | 42 | -15 | 9.8 | 14.2 | 202 | 15 | 1.7 | 1.1 | 1.10 | 2.05 | 3.19 | 3.48 | 3.8 | 12.1 |
| CHARTER ONE FINANCIAL | 3934.9 | 30 | -1 | NA | 14.2 | 262 | 19 | 2.1 | 1.2 | 1.89 | 1.11 | 1.97 | 2.22 | 1.8 | 12.3 |
| DIME BANCORP | 2975.8 | 27 | -12 | NA | 15.1 | 222 | 15 | 1.8 | 1.2 | 0.75 | 1.13 | 1.90 | 2.07 | 2.4 | 12.0 |
| GOLDEN STATE BANCORP (6) | 1068.1 | 19 | -49 | NA | 9.6 | 87 | 11 | 0.9 | 1.1 | 0.00 | 0.64 | 1.78* | 2.14 | 8.6 | 10.0 |
| GOLDEN WEST FINANCIAL | 5413.5 | 95 | -3 | 9.8 | 14.4 | 181 | 13 | 1.8 | 1.2 | 0.59 | 6.13 | 7.36 | 7.54 | 2.8 | 11.0 |
| WASHINGTON MUTUAL | 5010.1 | 11 | -8 | NA | 17.6 | 259 | 14 | 1.8 | 0.9 | 1.07 | 1.24 | 2.92 | 3.45 | 3.2 | 15.0 |
| INDUSTRY AVERAGE | 20697.9 | 43 | 43 | 36.7 | 12.7 | 723 | 39 | 4.8 | 1.8 | 0.40 | 0.95 | 1.21 | 1.79 | 6.3 | 20.3 |
| (A) BUSINESS MACHINES & SERVICES | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2658.8 | 25 | -13 | 12.3 | 18.9 | 354 | 18 | 1.0 | 1.1 | 1.36 | 1.21 | 1.37 | 1.68 | 5.9 | 15.4 |
| COMPUCOM SYSTEMS | 181.9 | 4 | -53 | 20.4a | 9.7 | 89 | 9 | 0.1 | 1.0 | 0.00 | 0.71 | 0.26 | 0.42 | 26.2 | 15.0 |
| DELUXE | 2789.2 | 35 | 1 | -24.7 | 21.2 | 485 | 23 | 1.4 | 1.5 | 4.26 | 0.55 | 2.33 | 2.63 | 3.0 | 10.0 |
| DIEBOLD | 2364.7 | 34 | -32 | 25.8 | 11.4 | 351 | 31 | 2.0 | 1.4 | 1.63 | 1.76 | 1.66 | 1.93 | 3.2 | 15.0 |
| HON INDUSTRIES | 1466.3 | 24 | -19 | 20.2 | 23.0 | 328 | 14 | 0.9 | 0.9 | 1.35 | 1.45 | 1.72 | 1.99 | 1.5 | 15.0 |
| MERISEL | 230.7 | 3 | -34 | NA | 4.2 | 151 | NM | 0.1 | 0.5 | 0.00 | -0.36 | 0.27 | 0.31 | 12.9 | 20.0 |
| MICROAGE (10) | 349.8 | 18 | 16 | 7.7 | -1.2 | 133 | NA | 0.1 | NM | 0.00 | 1.39 | -0.21 | 1.05 | 12.4 | 19.0 |
| MILLER (HERMAN) (5) | 1830.9 | 21 | -22 | 15.4 | 57.3 | 776 | 14 | 1.0 | 0.9 | 0.68 | 1.39 | 1.61 | 1.81 | 1.1 | 15.0 |
| PITNEY BOWES | 15267.9 | 56 | 25 | 17.0 | 32.3 | 893 | 29 | 3.6 | 2.1 | 1.61 | 1.80 | 2.08 | 2.35 | 1.3 | 13.0 |
| REYNOLDS & REYNOLDS (9) | 1563.2 | 21 | 15 | 3.9b | 26.6 | 429 | 17 | 1.1 | 1.1 | 1.70 | 0.70 | 1.27* | 1.50 | 2.1 | 15.0 |
| STEELCASE (2) | 2744.3 | 18 | NA | NA | 15.4 | 192 | 12 | 1.0 | 1.0 | 2.25 | 1.40 | 1.43 | 1.58 | 2.5 | 12.0 |
| TECH DATA (1) | 2045.8 | 40 | 4 | 24.6 | 13.9 | 240 | 18 | 0.2 | 0.8 | 0.00 | 1.92 | -2.33 | 2.80 | 1.1 | 22.8 |
| WALLACE COMPUTER SERVICES (7) | 970.8 | 22 | -42 | 12.9 | 13.6 | 187 | 13 | 0.7 | 1.0 | 2.85 | 1.86 | 1.71* | 1.85 | 3.2 | 13.0 |
| (B) COMPUTERS & PERIPHERALS | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 25032.4 | 47 | 61 | 74.2 | 7.2 | 784 | 39 | 1.9 | 1.7 | 0.15 | 0.98 | 1.00 | 1.96 | 9.1 | 18.8 |
| APPLE COMPUTER (9) | 4317.8 | 32 | 1 | NA | 18.8 | 289 | 15 | 0.7 | 1.2 | 0.00 | -8.29 | 2.10* | 2.71 | 9.2 | 13.0 |
| COMPAQ COMPUTER | 55250.0 | 33 | 15 | 233.0 | -27.1 | 529 | NM | 2.0 | 3.5 | 0.19 | 1.19 | 0.46 | 1.74 | 8.6 | 20.0 |
| DATA GENERAL (9) | 892.1 | 18 | 4 | NA | -40.2 | 235 | NM | 0.6 | NM | 0.00 | 1.26 | -3.11* | 0.49 | 20.4 | 15.0 |
| DELL COMPUTER (1) | 77354.1 | 61 | 190 | NM | 67.8 | 3973 | 64 | 4.6 | 1.9 | 0.00 | 0.64 | 1.06 | 1.45 | 4.8 | 30.0 |
| EMC | 36383.9 | 73 | 164 | 32.8 | 23.2 | 1199 | 54 | 10.0 | 1.6 | 0.00 | 1.04 | 1.47 | 1.92 | 2.6 | 30.0 |
| GATEWAY 2000 | 8757.4 | 56 | 71 | -3.5 | 25.9 | 732 | 29 | 1.2 | 1.3 | 0.00 | 0.70 | 2.17 | 2.80 | 4.7 | 20.0 |
| HEWLETT-PACKARD (10) | 64885.1 | 63 | 0 | 26.3b | 17.4 | 384 | 23 | 1.4 | 1.5 | 1.02 | 2.95 | 2.77* | 3.33 | 3.3 | 15.0 |
| INTERNATIONAL BUSINESS MACHINES | 154037.2 | 165 | 58 | NA | 32.5 | 838 | 27 | 1.9 | 1.9 | 0.53 | 6.01 | 6.73 | 7.74 | 2.7 | 13.0 |
| IOMEGA | 2053.4 | 8 | -38 | NA | -9.4 | 115 | 27 | 1.1 | NM | 0.00 | 0.42 | -0.23 | 0.31 | 31.0 | 15.0 |
| LEXMARK INTERNATIONAL GROUP | 5018.8 | 76 | 101 | NA | 42.3 | 973 | 25 | 1.8 | 1.3 | 0.00 | 2.17 | 3.29 | 4.00 | 2.3 | 17.5 |
| MAXTOR | 1302.0 | 14 | NA | NA | 20.1 | 1081 | NA | 0.6 | 1.9 | 0.00 | NA | 0.29 | 0.91 | 4.4 | 25.0 |
| MICRON ELECTRONICS (8) | 2180.9 | 23 | 149 | 2.7 | 11.5 | 523 | 46 | 1.3 | 2.0 | 0.00 | 0.92 | 0.50* | 0.63 | 30.2 | 22.5 |
| MINI-MAX | 3343.1 | 22 | 10 | 154.1 | -0.8 | 290 | NM | 0.7 | 1.5 | 0.00 | 1.07 | 0.76 | 1.78 | 10.7 | 20.0 |
| SEAGATE TECHNOLOGY (6) | 7234.9 | 30 | 53 | NA | -10.9 | 247 | NM | 1.1 | NA | 0.00 | 2.62 | -2.17* | 1.18 | 6.8 | 20.0 |
| SILICON GRAPHICS | 2296.1 | 12 | -1 | NM | -31.8 | 164 | NM | 0.8 | NM | 0.00 | 0.43 | -2.47* | -0.48 | 20.8 | 15.0 |
| STORAGE TECHNOLOGY | 3491.1 | 35 | 13 | NM | 27.6 | 420 | 17 | 1.5 | 1.1 | 0.00 | 1.90 | 2.14 | 2.62 | 2.7 | 15.0 |
| SUN MICROSYSTEMS | 28187.3 | 74 | 86 | NA | 20.3 | 746 | 38 | 2.8 | 2.1 | 0.00 | 1.96 | 1.93* | 2.76 | 1.8 | 18.0 |
| UNISYS | 7273.3 | 29 | 105 | NA | -60.0 | NM | NM | 1.0 | 1.6 | 0.00 | -5.30 | 1.03 | 1.31 | 4.6 | 17.3 |

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GROWTH
1993-97 | RETURN
ON
EQUITY | PRICE AS
- OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYSTS | | | |
|---|------------------------------|---------------------------|-------------------------|-------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|-------------------------|------------------------------|---------------------|----------------------------------|--|
| | | | | | | | | | | | | | 1998
CON-
SENSUS | VARI-
ATION
% | LONG-TERM
GROWTH
RATE
% | |
| WESTERN DIGITAL (6) | 1158.7 | 13 | 18 | NM | NM | 914 | NM | 0.4 | NM | 0.00 | 2.86 | -3.32* | -3.34 | 8.7 | 19.0 | |
| XEROX | 35230.3 | 118 | 46 | NM | 10.0 | 833 | 93 | 1.8 | 1.4 | 1.34 | 4.04 | 4.65 | 5.41 | 2.6 | 16.0 | |
| (C) COMPUTER SOFTWARE & SERVICES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 25504.5 | 48 | 53 | 37.8 | 13.8 | 845 | 48 | 8.7 | 2.2 | 0.16 | 0.82 | 1.30 | 1.70 | 4.4 | 23.6 | |
| AFFILIATED COMPUTER SERVICES (6) | 1850.5 | 38 | 46 | 15.5 | 11.5 | 353 | 32 | 1.4 | 1.5 | 0.00 | 1.05 | 1.11* | 1.62 | 1.2 | 22.5 | |
| AMERICA ONLINE (6) | 39859.4 | 88 | 287 | 116.6 | 13.8 | 3281 | 274 | 13.6 | 10.0 | 0.00 | -1.31 | 0.18* | 0.56 | 3.6 | 50.0 | |
| ASCEND COMMUNICATIONS | 12189.0 | 56 | 129 | NA | 17.0 | 923 | 51 | 9.4 | 1.7 | 0.00 | -0.66 | 1.18 | 1.65 | 4.8 | 27.5 | |
| AUTOMATIC DATA PROCESSING (6) | 23261.8 | 77 | 25 | 14.4 | 17.6 | 656 | 38 | 4.7 | 2.6 | 0.69 | 1.71 | 1.98* | 2.27 | 1.3 | 15.0 | |
| BMC SOFTWARE (3) | 11005.4 | 51 | 56 | 32.0 | 28.0 | 1164 | 43 | 12.6 | 1.4 | 0.00 | 0.77 | 1.46 | 1.84 | 2.7 | 25.5 | |
| CABLETRON SYSTEMS (2) | 2305.9 | 14 | -7 | NM | -37.8 | 223 | NM | 1.7 | 1.9 | 0.00 | -0.81 | 0.37 | 0.71 | 19.7 | 20.0 | |
| CHS ELECTRONICS | 777.4 | 15 | -14 | NM | 11.0 | 97 | 9 | 0.1 | 0.4 | 0.00 | 1.32 | 1.81 | 2.08 | 1.0 | 20.0 | |
| CISCO SYSTEMS (7) | 117779.6 | 75 | 103 | 36.5 | 19.3 | 1481 | 80 | 12.8 | 3.0 | 0.00 | 0.68 | 0.84* | 1.46 | 1.4 | 30.0 | |
| COMDISCO (9) | 2774.1 | 18 | 9 | 15.76 | 16.0 | 300 | 20 | 0.9 | 1.3 | 0.55 | 0.78 | 0.93* | 1.16 | 1.0 | 15.0 | |
| COMPUSA (6) | 1353.8 | 15 | -52 | NM | 3.8 | 320 | 99 | 0.2 | 2.2 | 0.00 | 0.99 | 0.33* | 0.78 | 9.0 | 20.0 | |
| COMPUTER ASSOCIATES INTERNATIONAL (3) | 23818.0 | 44 | -17 | 31.3 | 21.4 | 919 | 46 | 4.8 | 1.3 | 0.18 | 2.06 | 2.27 | 2.59 | 2.3 | 15.0 | |
| COMPUTER SCIENCES (3) | 9053.3 | 57 | 37 | 35.4 | 13.0 | 410 | 32 | 1.3 | 1.6 | 0.00 | 1.64 | 2.09 | 2.56 | 2.7 | 17.0 | |
| COMPUWARE (3) | 11416.7 | 62 | 95 | 32.2 | 28.8 | 1267 | 47 | 8.3 | 1.1 | 0.00 | 1.00 | 1.66 | 2.18 | 6.4 | 34.0 | |
| ELECTRONIC DATA SYSTEMS | 19209.5 | 39 | -11 | -0.3 | 15.2 | 330 | 22 | 1.2 | 1.8 | 1.54 | 1.48 | 1.67 | 1.96 | 5.1 | 13.0 | |
| FIRST DATA | 11852.1 | 27 | -9 | 3.0 | 10.6 | 302 | 28 | 2.3 | 1.3 | 0.30 | 0.79 | 1.57 | 1.77 | 2.8 | 13.5 | |
| GALILEO INTERNATIONAL | 4195.9 | 40 | 45 | NA | 22.9 | 507 | 22 | 2.9 | 1.4 | 0.75 | 1.70 | 1.85 | 2.13 | 1.4 | 15.5 | |
| HBO & CO. | 10760.4 | 25 | 4 | NA | 21.1 | 908 | 44 | 7.4 | 1.0 | 0.32 | 0.34 | 0.70 | 0.91 | 2.2 | 35.0 | |
| INACOM | 347.9 | 21 | -26 | 19.2 | 10.2 | 84 | 9 | 0.1 | 0.4 | 0.00 | 2.17 | 2.96 | 3.52 | 2.0 | 20.0 | |
| INGRAM MICRO | 5923.5 | 43 | 46 | 34.3a | 18.7 | 461 | 26 | 0.3 | 1.1 | 0.00 | 1.32 | 1.72 | 2.07 | 1.4 | 23.0 | |
| MICROSOFT (6) | 303536.0 | 122 | 89 | NA | 28.7 | 1673 | 60 | 19.8 | 2.9 | 0.00 | 1.32 | 1.67* | 2.56 | 1.7 | 25.0 | |
| NCR | 3650.5 | 37 | 34 | NA | 8.6 | 288 | 35 | 0.6 | 2.6 | 0.00 | 0.07 | 1.11 | 1.92 | 10.9 | 13.0 | |
| ORACLE (5) | 33287.7 | 34 | 54 | 30.1 | 32.5 | 1080 | 34 | 4.4 | 1.1 | 0.00 | 0.81 | 1.21 | 1.46 | 4.1 | 25.0 | |
| SABRE GROUP HOLDINGS | 5146.7 | 40 | 37 | NA | 26.5 | 554 | 23 | 2.4 | 1.9 | 0.00 | 1.53 | 1.69 | 1.98 | 2.0 | 12.6 | |
| SAFEGUARD SCIENTIFICS | 894.2 | 28 | -10 | 51.8 | 26.5 | 310 | 13 | 0.4 | 1.6 | 0.00 | 0.66 | 0.70 | 0.75 | 1.3 | 25.0 | |
| 3COM (5) | 13865.3 | 39 | 11 | 0.0 | 6.1 | 482 | 81 | 2.7 | 1.2 | 0.00 | 0.08 | 1.32 | 1.97 | 10.2 | 25.0 | |
| VANSTAR (4) | 519.8 | 12 | 6 | 174.8a | -14.3 | 326 | 28 | 0.2 | 2.5 | 0.00 | 0.81 | 0.24 | 0.86 | 10.5 | 20.0 | |
| YAHOO! | 17967.3 | 192 | 455 | NA | -3.7 | 4104 | NM | 119.8 | 7.4 | 0.00 | -0.27 | 0.43 | 0.62 | 6.5 | 60.0 | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | | |
| | 6199.1 | 40 | -1 | 10.7 | 4.2 | 242 | 93 | 0.9 | 4.2 | 2.42 | 0.20 | 1.28 | 1.57 | 38.1 | 8.6 | |
| (A) FOREST PRODUCTS | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 3460.6 | 37 | -9 | NA | -1.7 | 149 | NM | 0.6 | 5.3 | 2.53 | -0.94 | 0.69 | 1.26 | 45.3 | 9.5 | |
| GEORGIA-PACIFIC GROUP | 5073.6 | 57 | -7 | NA | -0.6 | 151 | NM | 0.4 | 6.5 | 1.76 | -0.94 | 0.97 | 1.52 | 62.5 | 9.0 | |
| LOUISIANA-PACIFIC | 1847.6 | 17 | -11 | NM | -2.8 | 147 | NM | 0.8 | 4.1 | 3.29 | -0.94 | 0.41 | 1.00 | 28.0 | 10.0 | |
| (B) PAPER | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 6620.5 | 40 | 1 | 10.7 | 5.1 | 256 | 93 | 1.0 | 4.0 | 2.40 | 0.37 | 1.37 | 1.62 | 37.0 | 8.5 | |
| BOISE CASCADE | 1785.1 | 32 | - | NM | -2.2 | 130 | NM | 0.3 | NM | 1.89 | -1.19 | -0.05 | 0.49 | 126.5 | 6.5 | |
| BOWATER | 2132.6 | 40 | -11 | NA | -0.9 | 116 | 658 | 1.2 | 2.3 | 2.03 | 1.25 | 2.19 | 2.27 | 50.2 | 8.0 | |
| CHAMPION INTERNATIONAL | 3972.7 | 42 | -8 | NM | -14.0 | 127 | NM | 0.7 | 7.8 | 0.48 | -5.72 | 0.82 | 1.25 | 60.8 | 6.5 | |
| CONSOLIDATED PAPERS | 2311.8 | 26 | -4 | 15.9 | 9.1 | 170 | 19 | 1.1 | 2.6 | 3.44 | 1.31 | 1.17 | 1.07 | 25.2 | 8.5 | |
| FORT JAMES | 8623.2 | 39 | 2 | NA | 18.9 | 897 | 50 | 1.2 | 1.4 | 1.53 | 0.35 | 2.51 | 2.90 | 2.1 | 11.0 | |
| INTERNATIONAL PAPER | 13335.5 | 43 | 1 | NM | 3.5 | 149 | 42 | 0.7 | 6.2 | 2.30 | -0.50 | 0.96 | 1.23 | 35.8 | 7.3 | |
| KIMBERLY-CLARK | 28512.2 | 55 | - | 32.2 | 19.9 | 717 | 37 | 2.3 | 1.7 | 1.90 | 1.58 | 2.44 | 2.79 | 2.5 | 12.8 | |
| MEAD | 3114.5 | 30 | 8 | 15.5 | 6.2 | 138 | 23 | 0.8 | 2.0 | 2.11 | 1.41 | 1.60 | 1.76 | 24.4 | 9.5 | |
| POTLATCH | 1096.9 | 38 | -12 | -1.2 | 4.1 | 117 | 28 | 0.7 | 3.5 | 4.60 | 1.24 | 1.43 | 1.65 | 24.8 | 7.5 | |
| UNION CAMP | 4475.4 | 65 | 20 | 12.9 | 2.9 | 228 | 81 | 1.0 | 9.5 | 2.78 | 1.16 | 0.91 | 1.17 | 48.7 | 7.5 | |
| WESTVACO (10) | 2847.0 | 28 | - | 30.0b | 5.9 | 127 | 22 | 1.0 | 3.1 | 3.13 | 1.58 | 1.30* | 1.44 | 25.7 | 7.0 | |
| WEYERHAEUSER | 9974.5 | 50 | 2 | -9.6 | 7.9 | 217 | 28 | 0.9 | 3.9 | 3.19 | 1.71 | 1.62 | 1.84 | 17.9 | 8.0 | |
| WILLAMETTE INDUSTRIES | 3884.6 | 38 | - | 10.1 | 1.1 | 192 | 38 | 1.1 | 4.0 | 1.83 | 0.65 | 0.88 | 1.20 | 36.7 | 10.0 | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | | |
| | 11246.9 | 66 | 15 | 33.7 | 12.1 | 440 | 82 | 3.1 | 7.2 | 0.85 | 1.46 | 1.54 | 1.87 | 42.6 | 14.2 | |
| (A) BROADCASTING | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 15336.8 | 42 | 36 | 48.0 | 9.0 | 371 | 208 | 5.0 | 21.0 | 0.11 | -0.28 | -0.62 | -0.50 | 94.4 | 17.1 | |
| CABLEVISION SYSTEMS | 6234.7 | 41 | - | NM | NM | NM | NM | 2.1 | NM | 0.00 | -0.12 | -2.26 | -2.20 | 37.3 | 12.3 | |
| CBS | 21051.3 | 30 | 1 | NM | -0.3 | 276 | NM | 3.2 | 36.1 | 0.67 | -0.24 | 0.03 | 0.33 | 21.2 | 27.5 | |
| CLEAR CHANNEL COMMUNICATIONS | 11616.7 | 47 | 18 | 48.0 | 1.8 | 309 | 161 | 10.2 | 5.9 | 0.00 | 0.34 | 0.28 | 0.39 | 15.4 | 28.5 | |
| COMCAST | 17902.8 | 49 | -4 | NM | 16.2 | 858 | 47 | 3.3 | NM | 0.19 | -0.66 | -0.72 | -0.35 | 97.1 | 12.5 | |
| COX COMMUNICATIONS | 14304.1 | 53 | 32 | NM | 23.0 | 777 | 17 | 8.7 | NM | 0.00 | -0.50 | -1.09 | -0.76 | 60.5 | 15.0 | |
| MEDIAONE GROUP | 24575.4 | 41 | 40 | NM | 12.4 | 209 | NA | 7.0 | NM | 0.00 | -0.88 | -1.05 | -1.10 | 30.0 | 14.0 | |
| TELE-COMMUNICATIONS | 22111.5 | 42 | 51 | NA | NM | NM | 604 | 3.6 | NM | 0.00 | -0.30 | -0.27 | -0.23 | 165.2 | 12.0 | |
| UNITED VIDEO | 4897.9 | 32 | 23 | NM | 1.2 | 199 | 210 | 2.2 | 21.0 | 0.00 | 0.12 | 0.10 | -0.07 | 328.6 | 15.0 | |
| INDUSTRY AVERAGE | | | | | | | | | | | | | | | | |
| | 9065.7 | 78 | 3 | 32.4 | 13.5 | 469 | 24 | 2.0 | 3.5 | 1.25 | 2.39 | 2.77 | 3.22 | 13.0 | 12.5 | |
| GROUP AVERAGE | 2301.6 | 19 | -33 | -6.2a | 6.0 | 178 | 30 | 1.7 | 2.1 | 1.27 | 0.71 | 0.65 | 0.76 | 7.9 | 14.0 | |
| 3M | 10000.0 | 48 | 11 | NM | NM | 769 | NM | 1.9 | 2.2 | 2.01 | -8.36 | 1.98 | 2.22 | 4.1 | 11.0 | |

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|--|------------------------|--------------------|---------------------|---------------------------|-----------------|--------------------------|-----------|-------------------|--------------------|---------|-------------|-------------------|------------------------------|-------------|-------------------------|
| | | | | | | | | | | | | | I/B/E/S 1998 CONSENSUS | VARIATION % | LONG-TERM GROWTH RATE % |
| AMSTERDAM | 18181.2 | 65 | 4 | 17.3 | 24.9 | 466 | 19 | 3.6 | 1.9 | 1.24 | 2.50 | 2.88 | 3.18 | 1.6 | 12.0 |
| HOLLINGER INTERNATIONAL | 1358.2 | 13 | -8 | -19.9a | 19.7 | 223 | 9 | 0.6 | 0.8 | 4.25 | 0.87 | 0.78 | 0.90 | 8.9 | 20.0 |
| KNIGHT-RIDDER | 4033.5 | 51 | -1 | 37.6 | 19.5 | 253 | 16 | 1.3 | 1.6 | 1.56 | 3.91 | 2.73 | 2.95 | 2.7 | 11.5 |
| McGRAW-HILL †† | 8806.8 | 90 | 21 | 122.5 | 22.4 | 591 | 27 | 2.4 | †† | 1.74 | 2.91 | †† | †† | †† | †† |
| †† Because Business Week is owned by the The McGraw-Hill Companies, the Scoreboard does not include forecasts of the company's earnings. | | | | | | | | | | | | | | | |
| NEW YORK TIMES | 5664.8 | 31 | -6 | 149.7 | 18.1 | 365 | 21 | 1.9 | 1.8 | 1.22 | 1.33 | 1.47 | 1.64 | 2.4 | 12.0 |
| PRIMEDIA | 1541.5 | 11 | -15 | NM | -19.6 | NM | NM | 1.0 | NM | 0.00 | -1.72 | -0.49 | -0.32 | 46.9 | 15.0 |
| READER'S DIGEST ASSOCIATION (6) | 2578.8 | 24 | 2 | -48.9 | 28.0 | 1122 | 34 | 1.0 | 18.8 | 0.83 | 1.24 | 0.16* | 0.77 | 10.4 | 8.0 |
| SCRIPPS (E.W.) | 4144.7 | 51 | 6 | 8.6 | 12.6 | 379 | 30 | 2.9 | 2.6 | 1.09 | 1.93 | 1.68 | 1.94 | 3.6 | 12.0 |
| TIME WARNER | 63978.8 | 106 | 71 | NM | 0.1 | 700 | NM | 4.5 | NM | 0.34 | -0.03 | -0.11 | 0.59 | 28.8 | 12.0 |
| TIMES MIRROR | 4754.3 | 59 | -5 | 55.7 | 8.0 | 620 | 44 | 1.5 | 1.7 | 1.23 | 2.29 | 2.59 | 2.96 | 3.0 | 13.0 |
| TRIBUNE | 7615.4 | 64 | 3 | 21.5 | 19.7 | 446 | 22 | 2.6 | 2.0 | 1.06 | 2.81 | 2.51 | 2.85 | 2.1 | 12.5 |
| WASHINGTON POST | 5363.4 | 532 | 9 | 19.0 | 29.9 | 365 | 12 | 2.6 | 2.7 | 0.94 | 26.15 | 22.30 | 24.72 | 3.4 | 9.0 |
| ZIFF-DAVIS | 1175.1 | 11 | NA | NA | -1.0 | 87 | NM | 1.0 | NM | 0.00 | -0.71 | -0.30 | -0.09 | 55.6 | 12.5 |
| COUNTRIES | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 3140.1 | 26 | -8 | 23.3 | 11.0 | 331 | 24 | 0.9 | 1.2 | 0.77 | 0.93 | 1.36 | 1.66 | 3.6 | 17.5 |
| (A) CONSTRUCTION & ENGINEERING | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 1096.1 | 25 | -6 | 6.3 | 9.3 | 175 | 13 | 0.3 | 0.9 | 1.13 | 1.10 | 1.91 | 1.95 | 4.1 | 15.2 |
| EMCOR GROUP | 163.1 | 16 | -20 | NM | 11.8 | 144 | 14 | 0.1 | 0.5 | 0.00 | 0.84 | 1.32 | 1.69 | 7.1 | 24.8 |
| FLUOR (10) | 3277.3 | 43 | 15 | -3.9b | 15.5 | 216 | 14 | 0.2 | 1.3 | 1.87 | 1.75 | 2.97* | 3.08 | 1.3 | 11.5 |
| FOSTER WHEELER | 697.3 | 17 | -37 | NM | -23.5 | 143 | NM | 0.2 | 0.7 | 4.91 | -0.26 | 1.92 | 1.84 | 4.9 | 12.0 |
| JACOBS ENGINEERING GROUP (9) | 966.2 | 38 | 49 | 11.9b | 15.2 | 271 | 18 | 0.5 | 1.2 | 0.00 | 1.80 | 2.08* | 2.42 | 0.8 | 15.0 |
| McDERMOTT (J. RAY) (3) | 958.4 | 25 | -43 | NA | 26.8 | 136 | 6 | 0.6 | 0.7 | 0.00 | 1.89 | 2.46 | 1.81 | 8.3 | 15.0 |
| MORRISON KNUDSEN (11) | 514.0 | 10 | -1 | 10.9 | 10.1 | 143 | 14 | 0.3 | 1.1 | 0.00 | 0.59 | 0.69 | 0.84 | 2.4 | 13.0 |
| (B) INDUSTRIAL DISTRIBUTION | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2411.0 | 24 | -9 | 15.3 | 8.4 | 202 | 22 | 0.4 | 1.2 | 0.87 | 1.25 | 1.28 | 1.70 | 4.9 | 15.2 |
| AIRGAS | 700.9 | 10 | -28 | 15.6 | 6.5 | 160 | 25 | 0.5 | 1.1 | 0.00 | 0.57 | 0.64 | 0.77 | 3.9 | 15.0 |
| ALLEGIANCE | 4514.4 | 40 | 128 | NA | 12.7 | 491 | 41 | 1.0 | 3.0 | 0.52 | 0.78 | 1.05 | 1.24 | 4.0 | 13.0 |
| APPLIED INDUSTRIAL TECHNOLOGIES (6) | 304.0 | 14 | -48 | 16.9 | 9.3 | 104 | 11 | 0.2 | 0.8 | 3.43 | 1.44 | 1.38* | 1.13 | 10.6 | 13.3 |
| ARROW ELECTRONICS | 2078.6 | 22 | -33 | NA | 11.3 | 142 | 13 | 0.3 | 0.9 | 0.00 | 1.64 | 1.58 | 1.94 | 5.7 | 15.0 |
| AVNET (6) | 2116.4 | 58 | -12 | 15.4 | 9.3 | 158 | 18 | 0.3 | 1.0 | 1.03 | 4.25 | 3.80* | 3.90 | 4.1 | 15.0 |
| BOISE CASCADE OFFICE PRODUCTS | 731.6 | 11 | -26 | 32.4 | 11.0 | 132 | 12 | 0.2 | 0.7 | 0.00 | 0.89 | 0.91 | 1.07 | 1.9 | 18.5 |
| CELLSTAR (11) | 379.6 | 6 | -35 | 46.2 | 25.7 | 193 | 8 | 0.2 | 0.5 | 0.00 | 0.89 | 0.63 | 0.81 | 9.9 | 20.0 |
| DYNEGY | 1972.6 | 13 | -26 | NA | -6.7 | 193 | NM | 0.1 | 1.4 | 0.39 | -0.58 | 0.64 | 0.87 | 10.3 | 15.0 |
| ENRON | 17363.2 | 53 | 26 | -29.8 | 9.8 | 255 | 25 | 0.6 | 1.7 | 1.91 | 0.32 | 2.01 | 2.35 | 3.0 | 15.0 |
| GENUINE PARTS | 5925.3 | 33 | -3 | 7.2a | 17.4 | 295 | 17 | 0.9 | 1.8 | 3.04 | 1.90 | 2.00 | 2.17 | 2.3 | 9.0 |
| GRAINGER (W.W.) | 4023.1 | 42 | -13 | 12.2 | 18.1 | 309 | 18 | 0.9 | 1.5 | 1.42 | 2.27 | 2.41 | 2.68 | 3.4 | 12.0 |
| HUGHES SUPPLY (1) | 662.5 | 28 | -21 | 22.8 | 12.5 | 140 | 11 | 0.3 | 0.7 | 1.23 | 2.30 | 2.60 | 2.96 | 3.7 | 15.0 |
| MARSHALL INDUSTRIES (5) | 432.0 | 26 | -13 | 1.0 | 7.9 | 106 | 14 | 0.3 | 1.0 | 0.00 | 1.99 | 1.77 | 2.22 | 1.4 | 14.0 |
| PIONEER-STANDARD ELECTRONICS (3) | 286.5 | 11 | -29 | 6.8 | 10.9 | 113 | 11 | 0.1 | 0.7 | 1.10 | 1.14 | 1.02 | 1.26 | 2.4 | 15.0 |
| PSS WORLD MEDICAL (3) | 1457.7 | 21 | -3 | NA | 6.4 | 368 | 58 | 1.0 | 0.9 | 0.00 | 0.23 | 0.83 | 1.07 | 1.9 | 28.5 |
| RYERSON TULL | 435.3 | 11 | -20 | 19.3 | 11.3 | 94 | 8 | 0.2 | 1.1 | 0.00 | 1.60 | 1.14 | 1.16 | 9.5 | 9.0 |
| UNISOURCE WORLDWIDE (9) | 549.1 | 8 | -45 | NA | -27.8 | 66 | NM | 0.1 | NM | 2.54 | 0.87 | -3.36* | 0.76 | 10.5 | 12.0 |
| UNITED STATIONERS | 976.9 | 27 | 10 | NA | 5.4 | 280 | 65 | 0.3 | 0.9 | 0.00 | 0.22 | 1.92 | 2.20 | 1.8 | 15.0 |
| VWR SCIENTIFIC PRODUCTS | 900.3 | 31 | 11 | 32.5 | 9.4 | 241 | 25 | 0.7 | 1.2 | 0.00 | 1.05 | 1.35 | 1.74 | 3.0 | 20.0 |
| (C) POLLUTION CONTROL | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 10255.1 | 29 | -14 | 23.5 | 11.2 | 364 | 42 | 0.8 | 3.2 | 0.89 | -0.89 | 1.32 | 2.15 | 3.4 | 13.2 |
| BROWNING-FERRIS INDUSTRIES (9) | 284.1 | 30 | -20 | 4.9b | 19.1 | 284 | 15 | 1.1 | 1.3 | 2.58 | 1.40 | 1.93* | 2.18 | 1.8 | 11.5 |
| SAFETY-KLEEN (8) | 626.7 | 14 | -29 | NM | 3.3 | 179 | 69 | 0.5 | 6.9 | 0.00 | -5.32 | 0.20* | 1.25 | 6.7 | 10.0 |
| WASTE MANAGEMENT | 24939.9 | 43 | - | 42.2 | NA | 628 | NA | NA | 1.3 | 0.09 | 1.26 | 1.82 | 3.01 | 1.7 | 18.0 |
| (D) PRINTING & ADVERTISING | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 3727.2 | 38 | 15 | 14.7 | 8.9 | 656 | 23 | 1.2 | 1.5 | 0.98 | 0.53 | 1.76 | 2.04 | 2.2 | 15.0 |
| BANTA | 770.6 | 27 | -1 | 1.4 | 13.3 | 184 | 14 | 0.6 | 1.1 | 1.95 | 1.44 | 1.89 | 2.18 | 4.1 | 13.0 |
| BIG FLOWER HOLDINGS | 483.9 | 24 | 1 | NA | -22.4 | 464 | NM | 0.3 | 0.9 | 0.00 | -1.79 | 1.86 | 2.24 | 0.5 | 15.0 |
| DONNELLEY (R.R.) | 5789.3 | 59 | - | NA | 25.4 | 449 | 19 | 1.2 | 1.8 | 1.98 | 1.40 | 1.94 | 2.21 | 3.2 | 12.0 |
| INTERPUBLIC GROUP | 9371.3 | 69 | 38 | 14.5 | 23.5 | 760 | 32 | 2.7 | 2.0 | 0.87 | 1.90 | 2.30 | 2.64 | 2.0 | 15.0 |
| OMNICOM GROUP | 9014.8 | 53 | 26 | 28.1 | 24.8 | 845 | 34 | 2.4 | 2.1 | 0.94 | 1.37 | 1.66 | 1.92 | 1.6 | 15.4 |
| TRUE NORTH COMMUNICATIONS | 1267.2 | 28 | 14 | NM | -12.8 | 417 | NM | 1.0 | 1.3 | 2.13 | -1.17 | 1.50 | 1.72 | 4.1 | 14.2 |
| WORLD COLOR PRESS | 1142.5 | 30 | - | - | 10.8 | 178 | 17 | 0.5 | 1.1 | 0.00 | 1.60 | 1.84 | 2.11 | 0.9 | 15.0 |
| YOUNG & RUBICAM | 1978.2 | 30 | NA | - | NM | 1953 | NM | 1.3 | 1.4 | 0.00 | -0.51 | 1.09 | 1.32 | 1.5 | 20.0 |
| (E) OTHER SERVICES | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 3143.4 | 24 | -15 | 35.4 | 14.4 | 360 | 27 | 1.3 | 1.0 | 0.51 | 1.01 | 1.15 | 1.36 | 3.0 | 21.5 |
| ABM INDUSTRIES (10) | 712.3 | 33 | 9 | 13.7 | 13.4 | 318 | 25 | 0.5 | 1.4 | 1.44 | 1.22 | 1.43 | 1.66 | 0.6 | 17.0 |
| AD INC. | 1574.3 | 28 | 13 | NM | 11.3 | 344 | 32 | 1.1 | 1.6 | 0.00 | 0.62 | 0.93 | 1.28 | 1.6 | 18.6 |
| AD STAFF | 392.8 | 27 | - | 26.3 | 10.7 | 478 | 44 | 0.3 | 1.0 | 0.00 | 0.53 | 0.67 | 0.91 | 7.7 | 38.5 |
| AMK TECHNOLOGY | 743.9 | 6 | NA | NA | NA | 167 | NA | 0.5 | 0.4 | 0.00 | 0.52 | 0.63 | 0.71 | 2.8 | 23.5 |
| BORG WARNER SECURITY | 430.9 | 18 | 4 | NM | 16.0 | 493 | 33 | 0.3 | 1.2 | 0.00 | 0.79 | 1.01 | 1.40 | 0.0 | 15.0 |
| CDI | 534.9 | 27 | 41 | 52.2 | 18.5 | 230 | 12 | 0.3 | 0.8 | 0.00 | 2.36 | 2.32 | 2.62 | 1.9 | 15.0 |
| CENDANT | 16179.1 | 19 | -45 | NA | 10.3 | 441 | 35 | 2.6 | 1.2 | 0.00 | 0.08 | 0.81 | 1.08 | 3.7 | 20.0 |



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PRICE | 1998
PRICE
CHANGE | EARNINGS
GROWTH
1997/98 | RETURN
ON
EQUITY | PRICE AS
OF
BOOK
VALUE | P-E
RATIO | PRICE-
SALES
RATIO | P-E
TO
GROWTH
RATE | YIELD | 1999 ESTIMATES FROM ANALYSTS | | | | |
|--------------------------------|-----------------------------|--------------------------|-------------------------|-------------------------------|------------------------|---------------------------------|--------------|--------------------------|-----------------------------|-------|------------------------------|------------------------------------|---------------------------|---------------------|-----------------------------|
| | | | | | | | | | | | 1997
ACTUAL | 1/8/E/S
1998
ANALYST
EST. | 1/8/E/S
CON-
SENSUS | VARIA-
TION
% | LONG-TERM
GROWTH
RATE |
| CONTINENTAL | 5769.6 | 55 | 41 | 18.7 | 18.7 | 441 | 45 | 4.5 | 2.0 | 0.33 | 1.19 | 1.39 | 1.65 | 0.6 | 20.0 |
| IMS HEALTH | 10630.4 | 66 | 49 | 30.0a | 20.2 | 1383 | 72 | 8.7 | 2.0 | 0.18 | 1.86 | 1.61 | 2.00 | 1.0 | 21.0 |
| INTERIM SERVICES | 981.2 | 21 | -20 | 23.1 | 7.3 | 136 | 17 | 0.5 | 0.7 | 0.00 | 1.05 | 1.27 | 1.58 | 2.5 | 24.0 |
| KELLY SERVICES | 1113.0 | 29 | -3 | 15.8 | 14.1 | 184 | 13 | 0.3 | 1.0 | 3.17 | 2.12 | 2.23 | 2.37 | 1.3 | 13.0 |
| MANPOWER | 1761.9 | 22 | -37 | NM | 19.2 | 252 | 14 | 0.2 | 0.9 | 0.81 | 1.97 | 1.58 | 1.87 | 3.7 | 15.0 |
| MODIS PROFESSIONAL SERVICES | 1336.7 | 12 | -48 | 82.6a | 7.3 | 102 | 14 | 0.7 | 0.5 | 0.00 | 0.93 | 0.82 | 1.08 | 0.9 | 27.0 |
| NORRELL (10) | 436.8 | 16 | -20 | 62.7 | 11.8 | 183 | 16 | 0.3 | 0.6 | 1.00 | 0.91 | 1.38 | 1.61 | 2.5 | 20.0 |
| NOVACARE (6) | 195.8 | 3 | -76 | 1.1 | 9.1 | 33 | 4 | 0.1 | 0.2 | 0.00 | 0.62 | 0.91* | 0.42 | 4.8 | 20.0 |
| NOVACARE EMPLOYEE SERVICES (6) | 167.5 | 6 | -23 | NA | 10.1 | 254 | 28 | 0.1 | 1.0 | 0.00 | NA | 0.17* | 0.33 | 3.0 | 35.0 |
| OLSTEN | 609.6 | 8 | -50 | NA | 1.9 | 74 | 39 | 0.1 | 1.0 | 2.13 | 1.15 | 0.56 | 0.79 | 7.6 | 13.0 |
| REPUBLIC INDUSTRIES | 7915.6 | 17 | -27 | 24.2 | 8.5 | 146 | 23 | 0.5 | 0.6 | 0.00 | 0.46 | 1.09 | 1.30 | 8.5 | 27.5 |
| ROBERT HALF INTERNATIONAL | 4300.5 | 47 | 18 | 59.3 | 24.3 | 849 | 36 | 2.6 | 1.4 | 0.00 | 1.00 | 1.39 | 1.66 | 4.8 | 25.0 |
| SERVICE CORP. INTERNATIONAL | 9636.1 | 37 | 2 | 25.3 | 12.5 | 321 | 26 | 3.5 | 1.3 | 0.96 | 1.47 | 1.51 | 1.81 | 1.1 | 18.5 |
| SERVICEMASTER | 6383.4 | 22 | 10 | 19.6 | 20.3 | 708 | 34 | 1.4 | 1.9 | 1.67 | 0.55 | 0.65 | 0.76 | 1.3 | 17.3 |
| STAFF LEASING | 213.1 | 9 | -52 | 76.5a | 53.1 | 351 | 7 | 0.1 | 0.3 | 0.00 | 1.26 | 0.94 | 1.13 | 2.7 | 30.0 |
| UNITED AUTO GROUP | 278.7 | 13 | -27 | NA | 2.4 | 81 | NM | 0.1 | 0.6 | 0.00 | -0.54 | 1.13 | 1.31 | 4.6 | 20.0 |

| | | | | | | | | | | | | | | | | |
|-----------|-------------------------|----------------|-----------|-----------|-------------|-------------|------------|-----------|------------|------------|-------------|-------------|-------------|-------------|------------|-------------|
| 22 | INDUSTRY AVERAGE | 45655.4 | 53 | 29 | 18.6 | 25.1 | 828 | 38 | 3.8 | 2.3 | 1.39 | 1.42 | 1.67 | 2.14 | 9.6 | 17.8 |
|-----------|-------------------------|----------------|-----------|-----------|-------------|-------------|------------|-----------|------------|------------|-------------|-------------|-------------|-------------|------------|-------------|

| | | | | | | | | | | | | | | | | |
|-------------------------------------|----------|----|-----|-------|-------|------|-----|------|-----|------|-------|-------|------|------|------|--|
| (A) EQUIPMENT & SERVICES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 42600.3 | 52 | 29 | 21.9 | 8.2 | 574 | 50 | 4.6 | 2.3 | 0.50 | 0.94 | 1.08 | 1.68 | 16.0 | 24.3 | |
| ADC TELECOMMUNICATIONS (10) | 4030.0 | 30 | -28 | 30.1 | 17.0 | 441 | 29 | 2.9 | 1.1 | 0.00 | 0.83 | 1.08 | 1.35 | 3.0 | 25.0 | |
| AIRTOUCH COMMUNICATIONS | 32774.4 | 57 | 38 | 71.6 | 5.3 | 402 | 55 | 7.0 | 1.9 | 0.00 | 0.78 | 1.02 | 1.35 | 6.7 | 30.0 | |
| AT&T | 109057.1 | 62 | 1 | 2.8 | 18.6 | 453 | 24 | 2.1 | 1.8 | 2.12 | 2.74 | 3.47 | 3.84 | 8.6 | 10.0 | |
| LUCENT TECHNOLOGIES (9) | 113075.0 | 86 | 115 | NA | 19.7 | 2297 | 118 | 3.8 | 5.9 | 0.19 | 0.42 | 0.73* | 2.14 | 2.8 | 20.0 | |
| MCI WORLDWIDE | 107963.9 | 59 | 95 | -1.2 | -6.5 | 244 | NM | 10.1 | 2.5 | 0.00 | 0.40 | 0.78 | 1.97 | 2.5 | 30.0 | |
| QWEST COMMUNICATIONS INTL. | 13076.0 | 40 | 34 | -33.1 | -23.8 | 355 | NM | 8.3 | NM | 0.00 | 0.07 | -0.08 | 0.30 | 23.3 | 45.0 | |
| SCIENTIFIC-ATLANTA (6) | 1528.0 | 19 | 16 | 23.7 | 12.4 | 239 | 19 | 1.3 | 1.0 | 0.31 | 0.78 | 1.02* | 0.60 | 18.3 | 20.0 | |
| SPRINT (FON GROUP) | 31387.3 | 73 | 24 | 10.0 | 9.3 | 337 | 37 | 2.0 | 3.1 | 1.37 | 2.18 | 1.92 | 2.28 | 5.3 | 12.3 | |
| TELEPHONE & DATA SYSTEMS | 2609.2 | 43 | -8 | NM | 1.3 | 118 | 89 | 1.5 | NM | 1.03 | -0.19 | -1.06 | 0.57 | 87.7 | 20.5 | |
| TELLABS | 10501.9 | 54 | 2 | 71.2 | 28.6 | 851 | 29 | 7.0 | 0.9 | 0.00 | 1.42 | 1.91 | 2.37 | 2.1 | 30.0 | |

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|--------------------------------|---------|----|----|------|-------|------|----|-----|-----|------|------|------|------|-----|------|--|
| (B) TELEPHONE COMPANIES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 49050.0 | 54 | 28 | 14.9 | 43.8 | 1111 | 28 | 2.9 | 2.4 | 2.39 | 1.94 | 2.33 | 2.66 | 2.3 | 10.6 | |
| ALLTEL | 14544.7 | 53 | 29 | 18.1 | 16.1 | 487 | 27 | 3.1 | 2.2 | 2.19 | 2.70 | 2.10 | 2.56 | 1.2 | 11.5 | |
| AMERITECH | 59730.3 | 54 | 34 | 10.7 | 32.0 | 553 | 17 | 3.5 | 2.6 | 2.22 | 2.08 | 2.35 | 2.60 | 2.3 | 9.0 | |
| BELL ATLANTIC | 87667.9 | 56 | 22 | 15.8 | 22.8 | 696 | 31 | 2.8 | 2.5 | 2.77 | 1.57 | 2.74 | 3.02 | 1.3 | 8.0 | |
| BELLSOUTH | 85417.8 | 87 | 55 | 33.5 | 20.5 | 537 | 27 | 3.8 | 3.0 | 1.65 | 3.29 | 3.26 | 3.65 | 2.5 | 8.9 | |
| CINCINNATI BELL | 4296.6 | 32 | 2 | NM | 22.3 | 664 | 30 | 2.0 | 1.4 | 1.27 | 1.41 | 1.33 | 1.73 | 3.5 | 17.0 | |
| FRONTIER | 5169.6 | 30 | 26 | NA | 11.1 | 521 | 47 | 2.0 | 2.0 | 2.95 | 0.33 | 1.00 | 1.23 | 5.7 | 15.0 | |
| GTE | 59601.0 | 62 | 18 | 29.8 | 28.5 | 726 | 26 | 2.4 | 2.2 | 3.04 | 2.90 | 3.09 | 3.52 | 0.9 | 9.0 | |
| SBC COMMUNICATIONS | 93767.5 | 48 | 31 | -2.1 | 31.9 | 813 | 24 | 3.5 | 2.1 | 1.95 | 0.80 | 2.10 | 2.39 | 1.7 | 10.8 | |
| U S WEST | 41244.7 | 60 | 48 | 1.2a | 209.6 | 5001 | 34 | 2.7 | 3.6 | 3.44 | 2.42 | 3.01 | 3.22 | 2.2 | 9.8 | |

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|-----------|-------------------------|---------------|-----------|------------|-------------|-------------|------------|-----------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 23 | INDUSTRY AVERAGE | 3383.0 | 30 | -16 | 20.9 | 15.8 | 199 | 14 | 0.6 | 1.1 | 0.86 | 2.41 | 2.60 | 3.05 | 11.4 | 11.5 |
|-----------|-------------------------|---------------|-----------|------------|-------------|-------------|------------|-----------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|

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|-----------------------|---------|----|-----|------|-------|-----|----|-----|-----|------|-------|-------|-------|------|------|--|
| (A) AIRLINES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 4034.7 | 37 | -17 | 19.1 | 28.0 | 217 | 9 | 0.5 | 0.9 | 0.03 | 4.42 | 4.48 | 4.90 | 19.0 | 9.4 | |
| ALASKA AIR GROUP | 981.4 | 37 | -3 | NM | 14.8 | 129 | 8 | 0.5 | 0.7 | 0.00 | 3.53 | 6.81 | 6.38 | 15.5 | 8.0 | |
| AMERICA WEST HOLDINGS | 563.7 | 14 | -24 | NA | 16.4 | 85 | 6 | 0.3 | 0.6 | 0.00 | 1.63 | 2.33 | 2.18 | 17.9 | 11.0 | |
| AMR | 11420.3 | 66 | 3 | NM | 20.3 | 174 | 9 | 0.6 | 0.9 | 0.00 | 5.39 | 7.75 | 7.08 | 12.1 | 9.0 | |
| CONTINENTAL AIRLINES | 2104.3 | 35 | -27 | NM | 36.1 | 193 | 7 | 0.3 | 0.6 | 0.00 | 5.03 | 6.17 | 5.88 | 16.5 | 10.0 | |
| DELTA AIR LINES (6) | 7705.5 | 54 | -10 | NM | 25.9 | 197 | 8 | 0.5 | 1.0 | 0.19 | 5.52 | 6.34* | 7.04 | 4.0 | 8.5 | |
| NORTHWEST AIRLINES | 2036.7 | 25 | -48 | NM | NM | NM | NM | 0.2 | NM | 0.00 | 5.29 | -1.40 | 3.72 | 20.4 | 8.5 | |
| SOUTHWEST AIRLINES | 7295.0 | 22 | 32 | 19.1 | 18.2 | 321 | 18 | 1.8 | 1.4 | 0.14 | 0.93 | 1.28 | 1.33 | 9.4 | 12.0 | |
| TRANS WORLD AIRLINES | 294.7 | 5 | -49 | NA | -27.3 | 109 | NM | 0.1 | NM | 0.00 | -1.98 | -0.92 | -1.06 | 69.8 | NA | |
| UAL | 3383.5 | 64 | NA | NA | 21.3 | 111 | 10 | 0.2 | 0.6 | 0.00 | 9.04 | 10.67 | 9.98 | 13.1 | 10.0 | |
| US AIRWAYS GROUP | 4561.8 | 52 | -16 | NM | 126.3 | 642 | 6 | 0.5 | 1.1 | 0.00 | 9.87 | 5.73 | 6.50 | 11.2 | 8.0 | |

| | | | | | | | | | | | | | | | | |
|------------------------------|---------|----|-----|------|------|-----|----|-----|-----|------|------|-------|------|------|------|--|
| (B) RAILROADS | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 12150.3 | 39 | -9 | 11.3 | 8.1 | 180 | 15 | 1.7 | 1.5 | 2.14 | 2.27 | 1.52 | 2.57 | 8.1 | 11.2 | |
| BURLINGTON NORTHERN SANTA FE | 15949.2 | 34 | 10 | 16.5 | 14.3 | 212 | 15 | 1.8 | 1.2 | 1.41 | 1.88 | 2.37 | 2.61 | 3.1 | 11.8 | |
| CSX | 9099.7 | 42 | -23 | NA | 10.8 | 152 | 14 | 0.9 | 1.7 | 2.88 | 3.62 | 2.31 | 3.13 | 7.7 | 10.6 | |
| NORFOLK SOUTHERN | 11523.4 | 30 | 0 | NA | 11.8 | 197 | 17 | 2.7 | 1.6 | 2.63 | 1.84 | 1.72 | 2.16 | 9.3 | 11.0 | |
| UNION PACIFIC | 12028.7 | 49 | -22 | -3.3 | -4.5 | 111 | NM | 1.2 | NM | 1.65 | 1.74 | -0.31 | 2.36 | 12.3 | 11.3 | |

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|------------------------------------|--------|----|-----|--------|------|-----|----|-----|-----|------|------|------|------|------|------|--|
| (C) TRANSPORTATION SERVICES | | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 1962.4 | 28 | 21 | 43.6 | 11.3 | 214 | 18 | 0.5 | 1.0 | 1.05 | 1.48 | 2.09 | 2.54 | 5.1 | 13.9 | |
| AIR EXPRESS INTERNATIONAL | 751.2 | 22 | 27 | 21.1 | 17.0 | 251 | 15 | 0.5 | 1.0 | 1.08 | 1.41 | 1.48 | 1.69 | 5.4 | 15.0 | |
| AIRPORT FREIGHT | 1444.7 | 27 | -14 | 33.6 | 17.7 | 174 | 10 | 0.4 | 0.8 | 0.60 | 2.45 | 2.81 | 3.05 | 6.8 | 12.0 | |
| AVIS RENT A CAR | 725.1 | 21 | -34 | NA | NA | 114 | 12 | 0.3 | 0.7 | 0.00 | 0.88 | 1.76 | 2.07 | 3.9 | 16.0 | |
| BUDGET GROUP | 449.5 | 13 | -64 | 205.7a | 10.3 | 69 | 8 | 0.2 | 0.3 | 0.00 | 1.60 | 1.90 | 2.10 | 10.0 | 20.0 | |
| CNF TRANSPORTATION | 1703.9 | 36 | -8 | 47.2 | 16.7 | 226 | 15 | 0.4 | 0.8 | 1.12 | 2.19 | 2.85 | 3.33 | 6.1 | 15.0 | |

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RATE |
| (C) AIRCRAFT & SPACE | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 9566.5 | 65 | 6 | 13.1 | 11.8 | 234 | 20 | 0.6 | 1.2 | 0.00 | 3.34 | 4.07 | 4.56 | 5.5 | 13.0 |
| FRITZ S. | 351.3 | 10 | -30 | -9.2 | 8.1 | 135 | 17 | 0.3 | 1.2 | 0.00 | 0.50 | 0.69 | 0.85 | 8.2 | 12.0 |
| GATX | 1862.7 | 38 | -4 | NM | -4.8 | 261 | NM | 1.1 | 0.9 | 2.65 | -1.28 | 2.83 | 3.22 | 4.2 | 15.0 |
| HERTZ | 3971.3 | 37 | -9 | NM | 19.5 | 324 | 15 | 1.0 | 0.9 | 0.54 | 1.86 | 2.47 | 2.78 | 1.4 | 17.0 |
| PITTSBURGH BAX GROUP | 171.3 | 9 | -67 | NM | -3.6 | 58 | NM | 0.1 | NM | 2.76 | 1.62 | -0.90 | 1.13 | 7.2 | 10.5 |
| ROBINSON (C.H.) WORLDWIDE | 929.7 | 23 | 1 | -6.1 | 10.7 | 575 | 58 | 0.5 | 1.5 | 1.06 | 0.28 | 1.03 | 1.18 | 1.7 | 15.0 |
| RYDER SYSTEM | 2064.9 | 29 | -13 | NM | 15.4 | 189 | 13 | 0.4 | 1.2 | 2.10 | 2.05 | 2.35 | 2.76 | 1.1 | 10.5 |
| TRINITY INDUSTRIES | 1675.2 | 39 | -13 | NM | 18.7 | 114 | 9 | 0.6 | 1.0 | 1.76 | 2.36 | 3.81 | 4.28 | 5.1 | 10.0 |
| (D) TRUCKING & SHIPPING | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 493.4 | 20 | -12 | 4.9 | 13.4 | 163 | 12 | 0.3 | 1.2 | 0.96 | 1.45 | 1.63 | 1.81 | 13.6 | 10.1 |
| ALEXANDER & BALDWIN | 1028.4 | 23 | -16 | 8.1 | 9.2 | 143 | 16 | 0.8 | 1.2 | 3.91 | 1.80 | 1.40 | 1.57 | 5.1 | 8.5 |
| ARKANSAS BEST | 115.2 | 6 | -41 | -2.0 | 11.9 | 70 | 6 | 0.1 | 0.8 | 0.00 | 0.84 | 1.00 | 1.14 | 7.9 | 7.5 |
| CONSOLIDATED FREIGHTWAYS | 271.4 | 13 | -8 | 0.3 | 8.8 | 108 | 13 | 0.1 | 1.4 | 0.00 | 0.89 | 1.22 | 1.32 | 23.5 | 7.5 |
| HUNT (J.B.) TRANSPORT SERVICES | 676.5 | 19 | 1 | -25.4 | 11.7 | 185 | 16 | 0.4 | 1.2 | 1.05 | 0.31 | 1.27 | 1.60 | 8.8 | 12.0 |
| LANDSTAR SYSTEM | 430.5 | 41 | 55 | 14.7 | 28.1 | 406 | 15 | 0.3 | 1.0 | 0.00 | 1.96 | 2.77 | 2.95 | 3.4 | 15.0 |
| ROADWAY EXPRESS | 305.7 | 15 | -33 | -2.0 | 11.4 | 118 | 10 | 0.1 | 1.5 | 1.35 | 1.80 | 1.25 | 1.42 | 19.0 | 8.0 |
| USFREIGHTWAYS | 710.5 | 27 | -17 | 15.1 | 15.0 | 160 | 11 | 0.4 | 0.7 | 1.39 | 2.19 | 2.57 | 2.77 | 12.6 | 14.0 |
| YELLOW | 410.5 | 16 | -35 | -2.1 | 11.4 | 118 | 11 | 0.1 | 1.4 | 0.00 | 1.88 | 1.55 | 1.74 | 28.0 | 7.5 |
| (E) UTILITIES | | | | | | | | | | | | | | | |
| INDUSTRY AVERAGE | 5194.2 | 35 | 2 | 6.5 | 8.3 | 191 | 20 | 1.2 | 3.8 | 4.11 | 1.93 | 2.07 | 2.36 | 5.0 | 5.8 |
| (A) ELECTRIC, WATER & COGENERATION | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 5774.4 | 35 | 6 | 6.1 | 9.8 | 191 | 19 | 1.3 | 4.1 | 4.27 | 1.91 | 2.16 | 2.35 | 4.4 | 4.9 |
| AES | 8235.0 | 46 | -2 | 1.5 | 10.5 | 481 | 30 | 3.6 | 0.9 | 0.00 | 1.11 | 1.69 | 2.14 | 7.5 | 30.0 |
| ALLEGHENY ENERGY | 4139.9 | 34 | 4 | 5.2 | 13.2 | 202 | 14 | 1.6 | 4.8 | 5.09 | 2.30 | 2.36 | 2.45 | 3.7 | 3.0 |
| AMEREN | 5651.6 | 41 | -5 | 1.2 | 12.1 | 181 | 14 | 1.7 | 4.9 | 6.17 | 2.82 | 2.83 | 2.88 | 3.8 | 3.0 |
| AMERICAN ELECTRIC POWER | 8873.2 | 46 | -10 | 14.3 | 11.7 | 183 | 15 | 0.8 | 4.8 | 5.18 | 3.28 | 3.25 | 3.45 | 2.0 | 3.0 |
| BALTIMORE GAS & ELECTRIC | 4563.3 | 31 | -10 | -1.8 | 9.7 | 152 | 15 | 1.4 | 3.3 | 5.47 | 1.72 | 2.35 | 2.44 | 2.0 | 4.0 |
| BEC ENERGY | 1946.3 | 41 | 9 | 4.4 | 11.3 | 182 | 15 | 1.2 | 5.1 | 4.56 | 2.71 | 2.69 | 2.91 | 3.8 | 3.0 |
| CALENERGY | 1864.5 | 31 | 9 | -8.1 | 6.6 | 227 | 32 | 0.8 | 1.2 | 0.00 | 0.75 | 2.17 | 2.22 | 5.9 | 12.5 |
| CAROLINA POWER & LIGHT | 7018.0 | 46 | 9 | 6.1 | 13.9 | 237 | 16 | 2.2 | 3.2 | 4.18 | 2.66 | 2.94 | 3.12 | 1.3 | 5.0 |
| CENTRAL & SOUTH WEST | 5838.3 | 28 | 2 | 4.1 | 11.0 | 150 | 14 | 1.1 | 4.7 | 6.33 | 1.55 | 1.96 | 1.98 | 3.5 | 3.0 |
| CINERGY | 5479.9 | 35 | -10 | 52.1 | 11.4 | 216 | 18 | 1.0 | 3.1 | 5.21 | 2.28 | 2.29 | 2.65 | 2.3 | 4.9 |
| CITIZENS UTILITIES | 2084.4 | 8 | -14 | 4.1 | 7.8 | 118 | 15 | 1.4 | 2.6 | 0.00 | 0.04 | 0.31 | 0.35 | 8.6 | 10.0 |
| CMS ENERGY | 5452.6 | 49 | 11 | NM | 12.1 | 284 | NA | 1.0 | 1.8 | 2.71 | 2.51 | 2.74 | 3.15 | 1.6 | 10.0 |
| CONNECTIV | 2464.6 | 23 | 0 | -1.5 | 7.0 | 132 | 15 | 1.0 | 4.0 | 6.70 | 1.66 | 1.66 | 1.75 | 1.7 | 3.5 |
| CONSOLIDATED EDISON | 11732.0 | 51 | 24 | 2.6 | 11.3 | 194 | 17 | 1.6 | 8.5 | 4.17 | 2.95 | 2.99 | 3.09 | 2.9 | 2.0 |
| DOMINION RESOURCES | 9023.4 | 48 | 9 | -8.9 | 9.5 | 166 | 15 | 1.0 | 5.5 | 5.59 | 2.15 | 2.82 | 3.00 | 3.3 | 3.0 |
| DPL | 3220.5 | 20 | 4 | 6.1 | 13.9 | 242 | 16 | 2.3 | 4.0 | 4.70 | 1.20 | 1.25 | 1.31 | 1.5 | 4.0 |
| DTE ENERGY | 6328.9 | 44 | 26 | -3.6 | 12.5 | 172 | 14 | 1.5 | 4.7 | 4.72 | 2.88 | 3.07 | 3.14 | 2.5 | 3.0 |
| DUKE ENERGY | 22629.0 | 63 | 13 | 4.4 | 13.9 | 281 | 19 | 1.3 | 2.3 | 3.52 | 2.50 | 3.40 | 3.63 | 2.2 | 8.0 |
| EDISON INTERNATIONAL | 9699.5 | 28 | 1 | 5.2 | 11.5 | 190 | 16 | 1.0 | 2.1 | 3.78 | 1.73 | 1.84 | 1.96 | 3.1 | 7.0 |
| ENERGY EAST | 3351.6 | 53 | 49 | 5.4 | 10.6 | 196 | 18 | 1.4 | 3.6 | 3.02 | 2.57 | 2.93 | 3.18 | 5.7 | 5.0 |
| ENTERGY | 7226.9 | 29 | -2 | -20.8 | 5.5 | 105 | 17 | 0.6 | 4.9 | 4.09 | 1.03 | 2.00 | 2.03 | 3.0 | 3.0 |
| FIRSTENERGY | 7334.4 | 31 | 1 | 273.2 | 7.9 | 165 | 16 | 1.5 | 4.8 | 4.85 | 1.94 | 2.15 | 2.46 | 2.4 | 3.0 |
| FLORIDA PROGRESS | 4148.7 | 43 | 9 | -29.1 | 10.2 | 222 | 21 | 1.2 | 3.8 | 5.01 | 0.56 | 2.80 | 2.86 | 7.7 | 4.0 |
| FPL GROUP | 11079.1 | 61 | 3 | 11.6 | 12.4 | 216 | 16 | 1.7 | 2.7 | 3.27 | 3.57 | 3.83 | 4.03 | 1.7 | 6.0 |
| GPU | 5606.5 | 44 | 4 | 1.2 | 10.8 | 160 | 14 | 1.3 | 3.8 | 4.70 | 2.77 | 3.33 | 3.17 | 3.2 | 3.5 |
| HAWAIIAN ELECTRIC INDUSTRIES | 1000.4 | 39 | -5 | 3.8 | 10.6 | 151 | 13 | 0.8 | 4.4 | 6.37 | 2.75 | 2.93 | 2.97 | 2.0 | 3.0 |
| HOUSTON INDUSTRIES | 4993.2 | 32 | 18 | -0.4 | 5.4 | 186 | 35 | 0.8 | 3.1 | 4.74 | 1.66 | 1.88 | 2.04 | 2.0 | 5.5 |
| ILLINOVA | 1940.8 | 27 | 0 | NM | -2.1 | 148 | NM | 0.8 | NM | 4.58 | 1.41 | -0.10 | 1.98 | 5.6 | 5.0 |
| LG&E ENERGY | 3631.0 | 28 | 13 | 4.3 | 11.8 | 286 | 19 | 1.4 | 4.2 | 4.39 | 1.47 | 1.67 | 1.79 | 3.9 | 4.0 |
| MIDAMERICAN ENERGY HOLDINGS | 2446.7 | 26 | 18 | 0.7 | 10.9 | 196 | 17 | 1.3 | 9.0 | 4.62 | 1.42 | 1.44 | 1.50 | 2.0 | 2.0 |
| NEW CENTURY ENERGIES | 5370.1 | 48 | 0 | 0.2 | 13.1 | 220 | 16 | 1.5 | 3.0 | 4.83 | 2.50 | 3.18 | 3.36 | 1.5 | 5.0 |
| NEW ENGLAND ELECTRIC SYSTEM | 2498.4 | 42 | -2 | 3.7 | 12.5 | 156 | 12 | 1.0 | 7.0 | 5.65 | 3.39 | 2.98 | 3.07 | 4.6 | 2.0 |
| NIAGARA MOHAWK POWER | 2882.7 | 15 | 46 | -12.3 | -3.6 | 90 | NM | 0.7 | 2.9 | 0.00 | 1.01 | 0.44 | 0.33 | 51.5 | 12.0 |
| NIPSCO INDUSTRIES | 3464.1 | 29 | 19 | 7.5 | 14.8 | 305 | 19 | 1.2 | 2.8 | 3.28 | 1.53 | 1.64 | 1.77 | 2.3 | 6.3 |
| NORTHEAST UTILITIES | 2058.1 | 16 | 33 | NM | -0.9 | 95 | NM | 0.5 | NM | 0.00 | -1.01 | -0.26 | 1.09 | 11.0 | 1.0 |
| NORTHERN STATES POWER | 4139.1 | 27 | -7 | 1.5 | 10.0 | 170 | 16 | 1.5 | 2.9 | 5.26 | 1.61 | 1.88 | 2.01 | 2.0 | 5.0 |
| OGE ENERGY | 2256.6 | 28 | 2 | 3.8 | 15.7 | 213 | 14 | 1.3 | 4.3 | 4.76 | 1.62 | 1.87 | 1.83 | 2.7 | 3.5 |
| PACIFICORP | 5574.0 | 31 | -13.4 | 1.9 | 13.9 | 139 | 72 | 0.9 | 6.9 | 5.76 | 0.68 | 0.90 | 1.26 | 6.3 | 3.0 |
| PECO ENERGY | 8989.8 | 40 | -12.4 | 14.0 | 288 | 19 | 1.7 | 3.6 | 2.49 | 1.44 | 2.60 | 2.72 | 5.5 | 4.3 | |
| PG&E | 11834.3 | 31 | 2 | -6.9 | 7.3 | 149 | 19 | 0.6 | 4.0 | 3.88 | 1.75 | 1.79 | 2.08 | 5.8 | 4.3 |
| PINNACLE WEST CAPITAL | 3860.7 | 46 | 9 | 9.1 | 10.4 | 179 | 18 | 2.9 | 2.85 | 2.74 | 2.86 | 3.09 | 1.9 | 5.5 | |
| POTOMAC ELECTRIC POWER | 3089.2 | 26 | 1 | -8.1 | 8.6 | 160 | 18 | 1.5 | 7.2 | 6.37 | 1.38 | 1.80 | 1.87 | 2.1 | 2.0 |
| PP&L RESOURCES | 4292.6 | 27 | 14 | -3.4 | 19.8 | 247 | 13 | 1.2 | 6.9 | 3.66 | 1.80 | 1.97 | 2.00 | 3.5 | 2.0 |
| PUBLIC SERVICE ENTERPRISE GROUP | 8954.7 | 39 | 23 | 1.3 | 12.0 | 172 | 14 | 1.5 | 7.1 | 5.54 | 2.41 | 2.76 | 2.74 | 3.7 | 2.0 |
| PUGET SOUND ENERGY | 2193.7 | 17 | -10 | -7.9 | 9.4 | 172 | 16 | 1.3 | 3.9 | 6.78 | 1.28 | 1.77 | 1.89 | 1.6 | 3.9 |
| SCANA | 3340.0 | 33 | 9 | 3.0 | 13.3 | 191 | 14 | 2.0 | 3.9 | 4.72 | 2.06 | 2.11 | 2.19 | 1.4 | 4.0 |
| SOUTHERN | 3440.0 | 30 | 14 | -2.5 | 11.7 | 204 | 17 | 1.7 | 4.2 | 4.54 | 1.42 | 1.77 | 1.87 | 1.6 | 4.0 |



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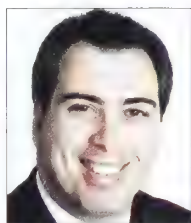
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EARNINGS PER SHARE

| COMPANY | MARKET
CAP. | RECENT
SHARE
PRICE | 1998
PRICE
CHANGE
% | EARNINGS
GROWTH
1993-97
% | RETURN
ON
EQUITY | PRICE AS
% OF
BOOK
VALUE | P/E
RATIO | PRICE-
SALES
RATIO | P/E
TO
GROWTH
RATE | YIELD
% | 1997
ACTUAL | 1998
ANALYST
EST. | 1999 ESTIMATES FROM ANALYST | | |
|--|----------------|--------------------------|------------------------------|------------------------------------|------------------------|-----------------------------------|--------------|--------------------------|-----------------------------|------------|----------------|-------------------------|-----------------------------|---------------------|----------------------------------|
| | | | | | | | | | | | | | 1999
CON-
SENSUS | VARI-
ATION
% | LONG TERM
GROWTH
RATE
% |
| TECO ENERGY | 3541.7 | 27 | -4 | 6.5 | 13.3 | 233 | 18 | 1.8 | 3.1 | 4.61 | 1.61 | 1.76 | 1.87 | 1.6 | 5.0 |
| TEXAS UTILITIES | 12606.8 | 45 | 7 | 14.6 | 7.1 | 152 | 20 | 1.0 | 3.2 | 4.94 | 2.85 | 2.81 | 3.20 | 1.3 | 5.0 |
| UNICOM | 18175.6 | 38 | 23 | NM | -2.6 | 161 | NM | 1.1 | 3.5 | 4.25 | -1.10 | 2.16 | 2.53 | 3.2 | 5.0 |
| UTILICORP UNITED | 18154.5 | 35 | 9 | 6.3 | 11.4 | 168 | 15 | 0.1 | 2.9 | 5.12 | 2.48 | 2.40 | 2.56 | 1.6 | 5.0 |
| WASHINGTON WATER POWER | 1024.8 | 18 | -25 | 8.0 | 9.8 | 137 | 13 | 0.3 | 3.1 | 2.62 | 1.96 | 1.47 | 1.62 | 3.7 | 4.0 |
| WESTERN RESOURCES | 2300.1 | 35 | -19 | 28.4 | 2.5 | 112 | 44 | 1.1 | 4.4 | 6.13 | 7.51 | 2.65 | 2.39 | 11.7 | 3.0 |
| WISCONSIN ENERGY | 3566.4 | 31 | 8 | -26.0 | 7.2 | 189 | 26 | 1.8 | 5.5 | 5.04 | 0.54 | 1.88 | 2.14 | 1.4 | 3.0 |
| (B) GAS, OIL & TRANSMISSION | | | | | | | | | | | | | | | |
| GROUP AVERAGE | 2956.3 | 34 | 15 | 7.9 | 2.7 | 190 | 24 | 0.9 | 2.6 | 3.50 | 2.00 | 1.72 | 2.38 | 7.6 | 9.3 |
| AGL RESOURCES (9) | 1233.4 | 22 | 6 | 6.16 | 12.3 | 188 | 15 | 0.9 | 3.1 | 5.01 | 1.37 | 1.41* | 1.39 | 2.9 | 5.0 |
| COLUMBIA ENERGY GROUP | 4735.8 | 57 | 8 | 13.1 | 13.3 | 245 | 19 | 0.7 | 1.5 | 1.41 | 3.27 | 3.51 | 3.89 | 2.3 | 11.0 |
| CONSOLIDATED NATURAL GAS | 5209.4 | 54 | -10 | 12.1 | 11.8 | 220 | 19 | 1.4 | 2.1 | 3.57 | 3.15 | 2.96 | 3.74 | 2.7 | 8.6 |
| EL PASO ENERGY | 4094.5 | 34 | 3 | 7.4 | 9.2 | 200 | 19 | 0.7 | 1.5 | 2.24 | 1.59 | 1.84 | 2.09 | 1.9 | 12.0 |
| EQUITABLE RESOURCES | 1093.2 | 29 | -17 | -1.1 | 8.7 | 133 | 15 | 0.8 | 2.9 | 4.01 | 2.16 | 1.37 | 1.86 | 4.3 | 7.5 |
| K N ENERGY | 1968.6 | 44 | 19 | NA | 7.3 | 156 | 18 | 0.5 | 1.2 | 2.56 | 2.45 | 2.76 | 3.38 | 5.6 | 13.0 |
| MCN ENERGY GROUP | 1495.7 | 19 | -53 | 12.9 | -26.0 | 152 | NM | 0.7 | 1.6 | 5.39 | 1.91 | 1.44 | 1.55 | 5.8 | 8.0 |
| NATIONAL FUEL GAS (9) | 1763.5 | 46 | -6 | 8.8b | 3.6 | 196 | 55 | 1.4 | 7.8 | 3.92 | 2.98 | 0.84* | 3.22 | 2.2 | 7.0 |
| NICOR | 2003.4 | 42 | 0 | 7.4 | 16.4 | 266 | 16 | 1.2 | 2.7 | 3.52 | 2.61 | 2.59 | 2.82 | 1.4 | 6.0 |
| ONEOK (8) | 1099.3 | 35 | -14 | 16.2 | 6.4 | 94 | 16 | 0.6 | 2.0 | 3.56 | 2.13 | 2.23* | 4.46 | 2.1 | 8.0 |
| SONAT | 3266.7 | 30 | -35 | -9.5 | -36.2 | 243 | NM | 0.8 | 2.7 | 3.64 | 2.01 | 1.12 | 1.64 | 6.7 | 11.0 |
| UGI (9) | 802.2 | 24 | -17 | 13.4b | 9.8 | 204 | 20 | 0.6 | 3.1 | 5.99 | 1.57 | 1.22* | 1.66 | 2.4 | 6.5 |
| WESTERN GAS RESOURCES | 299.4 | 9 | 58 | NM | -4.2 | 64 | NM | 0.1 | NM | 2.15 | -0.28 | -0.27 | 0.27 | 59.3 | 10.0 |
| WILLIAMS | 12323.3 | 29 | 1 | NA | 5.3 | 292 | 49 | 1.8 | 1.9 | 2.08 | 1.04 | 0.91 | 1.28 | 6.3 | 17.0 |

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

| | | | | | | |
|--------------------------------|------------------------------|----------------------------------|---------------------------|-----------------------------|----------------------------------|--------------------------|
| A | American Standard 13a | Bankers Trust 3a | C | Coca-Cola Enterprises 6c | D | Entergy 24a |
| AMP 10c | American Stores 10c | Banta 21d | Cabletron Systems 18c | Coleman 14d | Dana 2b | Equifax 17a |
| Abbott Laboratories 12b | AmeriSource Health 12a | Bard (C.R.) 12d | Cablevision Systems 20a | Colgate-Palmolive 6d | Danaher 15b | Equitable 17b |
| ABM Industries 21e | Ameritech 22b | Barnes & Noble 8 | Cabot 4 | Colt Industries 15a | Darden Restaurants 14a | Equitable Resources 24 |
| ABN Industries 21e | Ames Dept. Stores 8 | Bausch & Lomb 12d | CalEnergy 24a | Columbia Energy Group 24b | Data General 18b | Essex Intl. 16c |
| ABF Industries 22a | Amgen 12b | Baxter International 12d | Campbell Soup 10b | Columbia/HCA Healthcare 12c | Dayton Hudson 8 | Estee Lauder 6d |
| Administrative 21e | Amkor Technology 21e | BB&T 3c | Canadanga Brands 6c | Comcast 20a | Dean Foods 10b | Everest Reinsurance 17 |
| Advanced Micro 9d | Amoco 11a | Bear Stearns 17a | Capital One Financial 17a | Comdisco 18c | Deere 15c | Exide 15a |
| Advanta 17a | AMP 9d | BEC Energy 24a | Cardinal Health 12a | Comerica 3b | Dell Computer 18b | Express Scripts 12c |
| Aeroquip-Vickers 15a | AMR 23a | Beckman Coulter 9c | Carlisle 15a | Commerce Bancshares 3b | Delta Air Lines 23a | Exxon 11a |
| AF 24a | AmSouth Bancorporation 3c | Becton, Dickinson 12d | Carnival 14d | Commercial Metals 16b | Deluxe 18a | |
| Aetna 17b | Analog Devices 9d | Bell Atlantic 22b | Carolina Power 24a | Compaq Computer 18b | Detroit Diesel 2b | F |
| Affiliated Computer Svcs. 18c | Anderson-Kirsch 6c | BellSouth 22b | Carpenter Tech. 16b | Compass Bancshares 3c | Dial 6d | Family Dollar Stores 8 |
| AHAF 17b | Baxter International 5 | Belo (A.H.) 20b | Case 15c | CompuCom Systems 18a | Diebold 18a | Fannie Mae 17a |
| AHFI 15c | Bon 17b | Bemis 7b | Caterpillar 15c | CompUSA 18c | Dillard's 8 | FDX 23c |
| AGL Resources 24b | Apache 11a | Bergen Brunswig 12a | CBS 20a | Computer Associates 18c | Dime Bancorp 17c | Federal-Mogul 2b |
| Air Express Intl. 23c | Applied Industrial Tech. 21b | Berkley (W.R.) 17b | CDI 21e | Computer Sciences 18c | DiMon 6e | Federated Dept. Stores 1 |
| Air Products & Chemicals 4 | Applied Materials 15c | Best Buy 6b | CDW Computer Centers 8 | Compuware 18c | Disney (Walt) 14b | Ferro 4 |
| Airborne Freight 23c | Applied Power 15b | Bestfoods 10b | CellStar 21b | ConAgra 10b | Dole Food 10b | Fifth Third Bancorp 3b |
| Airgas 21b | Apria Healthcare Group 12c | Bethlehem Steel 16b | Cendant 21e | Connect 24a | Dollar General 8 | Fingerhut 8 |
| AirTouch Communications 22a | Archer Daniels 10b | Beverly Enterprises 12c | Centex 13b | Conoco 11a | Dominion Resources 24a | First American 3c |
| AK Steel Holding 16b | Arkansas Best 23d | Big Flower Holdings 21d | Central & South West 24a | Conseco 17b | Donaldson, Lufkin & Jenrette 17a | First American Finl. 17a |
| Alaska Air Group 23a | Armo 16b | Bindley Western Inds. 12a | Champion Enterprises 13b | Consolidated Edison 24a | Donnelley (R.R.) 21d | First Brands 15a |
| Alberto-Culver 6d | Armstrong World 6b | BJ Services 11b | Champion Intl. 19b | Cons. Freightways 23d | Dover 15c | First Data 18c |
| Albertson's 10c | Arrow Electronics 21b | Black & Decker 15b | Charter One Financial 17c | Cons. Natural Gas 24b | Dow Chemical 4 | First Security 3d |
| Alcoa 16a | Arvin Industries 2b | Block (H&R) 17a | Chase Manhattan 3a | Consolidated Papers 19b | Dow Jones 20b | First Tennessee Natl. 3c |
| Alexander & Baldwin 23d | Asarco 16c | BMC Software 18c | Chevron 11a | Consolidated Stores 8 | DPL 24a | First Union 3c |
| Allegheny Energy 24a | Ascend Communications 18c | Boeing 1 | Chicago Title 17a | Continental Airlines 23a | DTE Energy 24a | Firststar 3b |
| Allegheny Teledyne 5 | Ashland 11a | Borg-Warner Automotive 2b | Chiquita Brands Intl. 10b | Cooper Cameron 11b | Duke Energy 24a | FirstEnergy 24a |
| Allergiance 21b | Associated Banc-Corp 3a | Borg-Warner Security 21e | CHS Electronics 18c | Cooper Industries 9a | Dun & Bradstreet 17a | Fleet Financial Group 3c |
| Allergan 12b | Associates First Capital 17a | Boston Scientific 12d | Chubb 17b | Cooper Tire & Rubber 2c | DuPont 4 | Fleetwood Entls. 13b |
| AlliedSignal 5 | AT&T 22a | Bowater 19b | Cigna 17b | Coors (Adolph) 6c | Dynegy 21b | Fleming 10a |
| Allmerica Financial 17b | Atlantic Richfield 11a | Breed Technologies 2b | Cincinnati Bell 22b | Cordant Technologies 1 | | Florida Progress 24a |
| Allstate 17b | Automatic Data 18c | Briggs & Stratton 15c | Cincinnati Financial 17b | Corn Products Intl. 10b | | Fluor 21a |
| Alltel 22b | AutoZone 8 | Brinker International 14a | Citigroup 17a | Corning 15a | | FMC 15c |
| Amazon.com 8 | Avery Dennison 7b | Bristol-Myers Squibb 12b | Citigroup 17a | Corporate Express 8 | | Food Lion 10c |
| Amerad Hess 11a | Avis Rent A Car 23c | Brown Group 6a | Citizens Utilities 24a | Costco 8 | | Foodmaker 14a |
| Ameren 24a | Avnet 21b | Brown-Forman 6c | CKE Restaurants 14a | Countrywide Credit 17a | | Footstar 8 |
| America Online 18c | AVX 9d | Browning-Ferris 21c | Clear Channel Communs 20a | Coventry Health Care 12c | | Fort Motor 2a |
| America West Holdings 23a | | Brunswick 14d | CMS Energy 24a | Cox Communications 20a | | Fort James 19b |
| American Bankers Insurance 17b | | Brylcrepe 8 | CNA Financial 17b | Cracker Barrel 14a | | Fortune Mac 15a |
| American Express 17a | | Burlington Industries 15d | CNF Transportation 23c | Crane 15a | | Foster Wheeler 21a |
| American Financial Group 17b | | Burlington Northern Santa Fe 23b | Coastal 11a | Crestar Financial 3c | | Foundation Health 12c |
| | | Burlington Resources 11a | Coca-Cola 6c | Crompton & Knowles 4 | | FPL Group 24a |
| | | | | Crown Cork & Seal 7a | | Franklin Resources 17a |
| | | | | CSX 23b | | Freddie Mac 17a |
| | | | | Cummins Engine 15c | | Freeport-McMoran C&C |
| | | | | CVS 12a | | Fritz 23c |
| | | | | Cyprus Amax Minerals 16c | | Frontier 22b |
| | | | | Cytex Industries 4 | | |

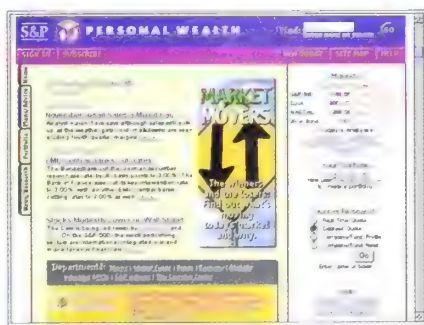
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INVESTMENT & FINANCIAL PLANNING INSIGHTS FOR 1999

Fools Rush Out

In late summer 1998, we reminded that the stock goes down as well as investors who had never witnessed a sharp market drop were dismayed when third quarter equities fund statements reflected 20% plus losses. Many of these "nervous Nellies" breathedlessly to their financial advisors seeking new strategies that would reduce downside risk while preserving full upside potential.

Investment managers patient-ly maintained that no magical formula

Ideally, they counseled their clients that over the long period in accurate statistics available, U.S. equities had an average annualized total return of 11%, nearly that of any asset class. They may have mentioned that this period includes the Great Depression, numerous wars, three

unlabeled political and economic crises" here and abroad. At last, they steered their clients to the conclusion that, yes, investors have been, and likely continue to be, unable to adequately compensate for the risks and shortfalls inherent in equities.

"Creative" financial planners may have dusted off the discredited strategies of the past. We noted increased interest in market timing services and tactical allocation funds - which purport to be market timing in sheep's clothing. As told, most market tim-

ing programs have failed to boost returns above that of a buy-and-hold strategy. Timing-related commission costs and capital gains tax liabilities incurred along the way create a natural drag on long-term performance. Also, because a large percentage of total market advances come in compressed periods of time, being caught sitting on the sidelines can substantially diminish long-term equities returns. To underscore this point, one need look no

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further back than the S&P 500's 18% rally in late October/early November.

Stock market investing is often subject to distressful cyclical retreats. Serious investors need to learn how to manage their emotions under such circumstances. In our view, the only sensible response to sharp market declines is to dispassionately review your financial objectives and stick to a strategy capable of achieving them. Last, utilizing a selection of well managed mutual funds can help one overcome temporary anxiety associated with short-term market retreats.

Taxes: The Cost of Taking Short-Term Gains

If in 1970 you had invested \$100,000 in the S&P 500 you'd have ended up with \$3 million by the end of 1997 - theoretically: before federal taxes and the associated trading costs (assuming a modest 30% annual turnover rate) consumed \$1.2 million of your money. Furthermore, research (see box) has poked holes in some classic strategies to keep a lid on taxes.

Index funds, for example, lower turnover and hence taxes for a while. But when shares are sold the paper gets paid. Meanwhile, you've sacrificed any potential premium from active investment. Or you can emphasize low- over high-dividend stocks, shifting returns toward favorably taxed capital gains, but if history is a guide, the benefit will

be overwhelmed by superior pre-tax returns among the high-yielders. And simply refusing to sell is a risky maneuver that can cost you gains and spawn overconcentrated portfolios.

Studies have reinforced one piece of common wisdom, though: postponing realizing gains until they qualify for the long-term rate (which kicks in after a one-year hold). If a managed stock portfolio earning 10% entirely in capital gains were turned over in six months, today's federal and state taxes and the associated trading costs would halve the annual compounding rate for a top-bracket investor.* Management fees would typically subtract another

1%, leaving the investor with a meager 3.9%. By extending the hold modestly, to 18 months, the effective annual burden of taxes and trading costs is cut in two and the take-home grows to 6.5%, two-thirds more capital over 20 years (see chart below).

Still, a stock's return potential

Bernstein

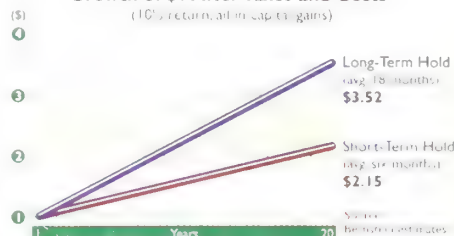
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sometimes declines quickly enough that it's wise to pocket the profits fast. And indeed if you're reducing a position you can sometimes save on taxes by selling short-term lots with small gains. So be cautious about high turnover - but sensitive to the limitations of using any one tax-reducing tactic in isolation.

Growth of \$1 After Taxes and Costs*
(10% return, all in capital gains)



for short- and long-term holds, respectively, and a tax deduction on investment losses, which is only partially deductible, if at all, depending on income and certain other factors.

The Benefits of Diversification

Don't put all your eggs in one basket.' This advice is the basis behind asset allocation, the concept of diversifying an investment portfolio across several major asset classes such as stocks, bonds and cash.

Lately, there has been a certain level of volatility in the financial markets. Asset classes often behave differently in response to changing economic and political conditions. At various points in time, stocks have historically done better than bonds, while in other instances bonds could have been the stronger performer. For example, despite the strong performance of large company U.S. Stocks in the past three years, this asset class, as measured by the S&P 500 Index, has been surpassed by alternative asset classes in seven of the last ten years (source: Micropal).

It may be tempting to simply invest in whatever asset is performing well at the time. However, this approach does not take into account the sometimes surprising swings in market behavior that can quickly erase gains made by an undiversified portfolio.

Asset allocation can help provide the best protection against the whims of a fickle market. By diversifying your investments, you create a well balanced portfolio that suits your tolerance for risk - and maintains that balance as your goals and your life stages change.

Asset allocation also allows you to take advantage of imbalances among markets. For

example, the differences between the stock and bond markets and between domestic and foreign markets could create investment opportunities. Further, diversification allows you to take advantage of potential imbalances within markets, such as price differences between value and growth stocks in the equity markets and between short-term and long-term bonds in the fixed income markets.

Unfortunately, many novice

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investors tend to put too much time searching for the "hot" investment of the day rather than reviewing whether the investments they buy support a solid asset allocation framework. This is where the value of a financial advisor's advice

The main objective of any financial advisor who uses asset allocation is simple: to grow the value of an account at a rate equal to the client's goals without taking unnecessary risk. For most investors, reducing or managing the risk in a portfolio so they can sleep at night is equally as important as increasing their return.

Tax-efficient Portfolio Management

Would you choose to dine in a four-star restaurant where your entree was whisked away unfinished? In addition, you owe a 30% mandatory gratuity. This unpalatable recipe is on the plate for many investors in equity mutual funds as these companies make their annual distributions.

With waning returns and juggling of portfolios to meet redemption demand, many funds are reporting scant investment results and a tax bill on realized gains to boot. The long bull market has left a heritage of low cost basis securities that challenge individual investors to maximize value in the marketplace and on their tax returns. How does one balance prudent portfolio management with intelligent tax management?

While taxes alone should never dictate financial strategy, they are a vital component in selection of investment vehicles, diversification of existing positions and appropriate portfolio turnover. The concept of after-tax return has been overshadowed by successive 20%+ annual stock market returns. Furthermore, investment strategies with an exclusively tax-oriented focus have often proved detrimental.

A well-managed individual security portfolio requires careful consideration of asset transition and an investment discipline that focuses on core companies which can often be held for multi-year periods. Minimization of turnover and appropriate offset of gains and losses can produce a modest

effective current tax rate. portfolio appreciation accomplished by viewing individual security transitions within your specific tax circumstance.

Solid economic growth, particularly exemplified in the technology sector, has affected not only portfolio gains, but also a large portion of the net worth



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corporate executives. Due to increasingly tight tax regulations on strategies designed to produce diversification, avoid capital gain (short-term gains against the box was one concept), there remain limited methods for sheltering individual stock risk and building a productive core portfolio. Concentrated low cost basis positions require careful planning to diversify business and maximize net value.

Any discussion of historical or prospective investment returns should include consideration of the impact on the investors. Quality investment management services, focused on the specific tastes of the individuals, provide an appealing menu for the tax-conscious investor.

Internet Launches Third Generation of Computing

fundamental factors drive the emerging tech-sector to stock market tip over the next few which would reverse the 62% underperformance since mid-1996 by the Licht & Quist Growth Index S&P 500.

are historically cheap ons measured by the the p/e to the earnings rate. The broad market at more than 3.5 times ings growth ile the emerg-nology sector und 0.7 times th rate.

d are rapidly ing earnings, ould increase s year, versus rowth rate for d market.

and most at is the re-set of the Generation of ing" in 40 hat will be -centric. This ve technology and provide a

oductivity dividend for omy for years to come. Third Generation of ing" could generate a dollars in new market ation wealth over the lf dozen years, which e similar to what took ring the "Client/Server" Generation of Com-between 1985-1995.

igital revolution is only ginning. The Internet se growth to accelerate ntly in the information gy sector and across ctors of the economy as ivity to the Internet o several hundred mil-scribers. This realiza-fueled outperformance

of Internet stocks this year.

The present discrepancy between valuations and earnings is quite likely to be resolved in favor of technology. It is difficult to recall a similar prior period when large cap stocks were so fully valued in the face of a major slowdown in earnings, which could last until 2000, while emerging technology was so historically undervalued at a time when its earnings were about to explode, as a

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result of a broad array of new product offerings largely centered around the Internet. This could enable the emerging technology sector to show superior performance over the next several years, when the broad market itself may merely languish owing to lackluster growth.

Asset Allocation Key for 1999 and Beyond

Asset allocation will become increasingly important in 1999 and beyond as the ripple effect of recent emerging market's volatility is felt around the globe. One of the greatest challenges facing any investor is determining the best blend of assets for their portfolio- one which will achieve the goals of the portfolio and expose the investor to a tolerable level of risk.

Recent studies show that 92% of a portfolio's returns will be determined not by stock selection but rather the division between stocks, bonds, cash, and their subclasses.

Investors should be aware that all asset allocation strategies are not created equal. Investment strategists use a variety of techniques to arrive at recommended asset mixes. There is no "set

standard" for asset allocation. Recently, Wilshire Associates, a company that tracks the asset allocation advice of major brokerage firms, reported that on the same day in March of 1998, brokerage firms were recommending bond allocation ranging from 10% to 50% of an investor's portfolio.

Over the past 70 years, equities have outperformed all other types of investments, offering an average annual total return of 10.5% compared to 5.2% for long-term government bonds and 3.7% for treasury bills. At the same time, stocks possess a considerably larger amount of volatility than do bonds or T-bills, and subsequently offer a greater degree of risk. Since stocks are historically riskier than bonds or cash, stocks

should also offer a greater potential for return since the investor is assuming additional risk.

When the current expected return from stocks is greater than the risks, stocks would be considered more attractive than bonds or cash, and the recommended percentage of stocks in a portfolio would be higher.



Financial Advisors

At Richmark Capital we understand the importance of diversification and discipline. An asset allocation model should be constructed based on an individual's risk tolerance and time horizon, not on which particular index was the best performer last year. It is crucial that neither investors or their advisors get caught up in market euphoria, and stay the course during times of increased volatility.

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Everyone understands why carrying all of your eggs in one basket is not a good idea. It is too risky; if you drop the basket, you conceivably lose everything.

Investors should consider several factors when evaluating appropriate asset allocation models. Asset allocation advice is by its nature often contrary to market sentiment; following a good asset allocation model in a disciplined manner, regardless of current market trends, can enable investors to achieve superior returns with minimized risk.

Equally as important to a portfolio's success is the continued monitoring of its asset classes and its rebalancing if necessary.

Executive Benefits Within Your Financial Plan

personal income tax shelters and increasingly onerous limitations on qualified retirement plans, the nonqualified plan has emerged as the bridge to pre-tax wealth accumulation for high earning individuals.

Nonqualified plans may take the form of employee funded salary deferral plans or employer funded supplemental retirement plans. Nonqualified plans are not subject to discrimination rules and contribution limitations like qualified plans. However, a nonqualified plan must be "un-funded" and must be limited to "a select group of management or highly compensated employees." These requirements being met, employees receive the same tax treatment as a qualified plan, i.e., contributions are not included in income until benefits are received. Unlike a qualified plan, employers receive no deduction for amounts contributed to a nonqualified plan until benefits are paid.

Funding A nonqualified plan must represent the employer's "unfunded and unsecured promise to pay" future compensation. Employee discomfort with the lack of security provided by unfunded plans has led to various security devices, the most common of which is the "Rabbi Trust." This trust is irrevocable and provides security to the employee even in the event of employer insolvency, at which time the trust assets may be reached by the employer's creditors. The assurance of an IRS Model Rabbi Trust and recent

simplification of reporting requirements for such trusts have resulted in their use to informally fund the vast majority of nonqualified plans.

Flexibility: Three flexible payout alternatives can add to employee security and convenience: 1) call provisions, which allow employees to receive funds, at any time, sub-



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ject to a penalty; 2) in-service withdrawal provisions, which allow employees to elect in advance to receive funds at a fixed future date; and 3) hardship withdrawal provisions, which allow employees to request emergency distributions.

Investment Direction Like qualified plans, nonqualified plans can allow participants to direct the investment of their funds.

Assimilating Non-Qualified Benefits into Personal Financial Plan: The financial planning function can be extremely helpful in 1) determining the affordable amount of pre-tax deferral, and 2) calculating the long-range effect of the non-qualified program when combined with the participant's other accumulation plans.

Passing the Gauntlet in 1999

Transferring a business or estate after the majority owner dies can create a tremendous financial hardship for the heirs because of the high Federal Estate Tax rates applicable to the deceased's estate - from 38 - 55% after the \$1,300,000 family owned business exclusion.

If the owner desires to "pass the gauntlet" to the children there are several planning techniques available to reduce the taxes and pay the remaining transfer costs.

1) Make a will and create a family bypass trust. This increases your exemptions to \$1,000,000 for each parent by 2007.

2) Create a Family Limited Partnership which may allow discounts on your business, ranch or farm from 10-35%.

3) Begin annual gifting to an irrevocable trust. Each parent can gift \$10,000 per year multiplied by as many beneficiaries as they choose.

4) Have the irrevocable trust purchase an appropriately designed life insurance policy to pay for the remaining tax liability with the trust being the owner and beneficiary. At the owner's death, insurance death benefits will be paid to the trust completely income and estate tax free. Your executor may purchase estate assets with those funds which may then be used to pay the taxes.

Each of the above processes may allow for the business to pass intact to the heirs and reduce the estate liability instead of forcing the heirs to conduct a "fire sale" of company assets to pay the transfer tax

liabilities.

The ownership arrangement of life insurance policies is a critical issue for the business owner. Incorrect ownership designations may increase estate tax up to 50% death benefit. Ownership arrangements which would include the death proceeds in the estate are "any incident of ownership", such as having insured, the business, or controlling corporate stock as the owner. A sibling or



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Author: Jack R. CLU, ChFC.

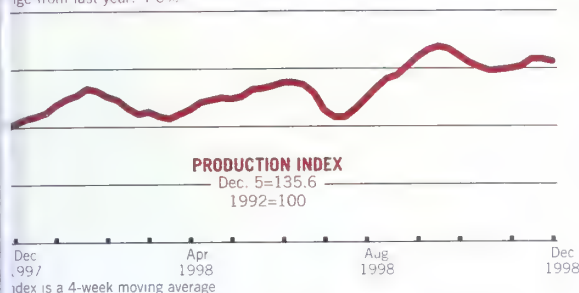
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ovable trust ownership eliminate additional estate taxes on these benefits.

Many successful business owners have been busy caring for their estate, and consequently haven't taken the necessary steps to perpetuate the business. Proper planning with an attorney, accountant, insurance officer, and a financial planner can save significant costs while preserving the business for future generations.

PRODUCTION INDEX

Change from last week: -0.1%
Change from last year: 4.0%



The production index declined slightly in the latest week, and the index calculation of the four-week moving average took an even larger spill, to 134.2, from 135.6 in the previous week. On a seasonally adjusted production levels of steel, coal, lumber, and rail-freight traffic declined. Seasonably warm weather caused a sharp drop in electric output. Auto output production were up.

Production index copyright 1998 by The McGraw-Hill Companies

PRICING INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|--|-------------|------------|--------------|
| PRICES (12/11) S&P 500 | 1166.46 | 1176.74 | 22.3 |
| RATE BOND YIELD, Aaa (12/11) | 6.20% | 6.22% | -9.4 |
| SUPPLY, M2 (11/30) billions | \$4,376.2 | \$4,378.7r | 8.4 |
| CLAIMS, UNEMPLOYMENT (12/4) thous | 314 | 313r | -0.3 |
| MOORTGAGE APPLICATIONS, PURCHASE (12/11) | 277.2 | 299.6 | 18.0 |
| MOORTGAGE APPLICATIONS, REFINANCE (12/11) | 1,879.1 | 2,055.1 | 127.1 |

S: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

INTEREST RATES

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|--|-------------|----------|----------|
| BANK OF AMERICA FUNDS (12/15) | 5.10% | 4.66% | 5.56% |
| COMMERCIAL PAPER (12/15) 3-month | 5.00 | 5.00 | 5.70 |
| CERTIFICATES OF DEPOSIT (12/16) 3-month | 5.14 | 5.12 | 5.80 |
| MORTGAGE (12/11) 30-year | 6.89 | 6.89 | 7.35 |
| FIXED RATE MORTGAGE (12/11) one-year | 5.71 | 5.74 | 5.85 |
| ADJUSTED RATE MORTGAGE (12/11) | 7.75 | 7.75 | 8.50 |

S: Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|-----------|--------------|
| STEEL (12/12) thous. of net tons | 1,881 | 1,747# | -12.9 |
| AUTOS (12/12) units | 129,233 | 125,571r# | -1.9 |
| TRUCKS (12/12) units | 157,604 | 154,991r# | 2.3 |
| ELECTRIC POWER (12/12) millions of kilowatt-hrs. | 63,764 | 60,029# | -5.7 |
| CRUDE-OIL REFINING (12/12) thous. of bbl./day | 14,353 | 14,226# | -4.2 |
| COAL (12/5) thous. of net tons | 22,827# | 20,500 | 3.6 |
| LUMBER (12/5) millions of ft. | 459.8# | 326.5 | 0.8 |
| RAIL FREIGHT (12/5) billions of ton-miles | 29.2# | 23.9 | 3.5 |

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPAl, SFPAl, Association of American Railroads

PRICES

| | LATEST WEEK | WEEK AGO | YEARLY % CHG |
|---|-------------|----------|--------------|
| GOLD (12/16) \$/troy oz. | 294.100 | 294.200 | 2.2 |
| STEEL SCRAP (12/15) #1 heavy, \$/ton | 85.50 | 85.50 | -40.4 |
| COPPER (12/11) ¢/lb. | 70.2 | 72.4 | -4.9 |
| ALUMINUM (12/11) ¢/lb. | 61.0 | 62.5 | -20.1 |
| COTTON (12/11) strict low middling 1-1/16 in., ¢/lb. | 63.60 | 64.33 | -1.4 |
| OIL (12/15) \$/bbl. | 11.33 | 11.02 | -37.1 |
| CRB FOODSTUFFS (12/15) 1967=100 | 187.14 | 196.95 | -20.8 |
| CRB RAW INDUSTRIALS (12/15) 1967=100 | 265.74 | 266.57 | -13.6 |

Sources: London Wednesday final setting, Chicago market, Metals Week, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

| | LATEST WEEK | WEEK AGO | YEAR AGO |
|--|-------------|----------|----------|
| JAPANESE YEN (12/16) | 116.47 | 117.96 | 126.83 |
| GERMAN MARK (12/16) | 1.67 | 1.67 | 1.77 |
| BRITISH POUND (12/16) | 1.67 | 1.66 | 1.65 |
| FRENCH FRANC (12/16) | 5.61 | 5.60 | 5.92 |
| ITALIAN LIRA (12/16) | 1656.0 | 1651.8 | 1734.5 |
| CANADIAN DOLLAR (12/16) | 1.54 | 1.54 | 1.42 |
| MEXICAN PESO (12/16) | 9.883 | 9.955 | 8.105 |
| TRADE-WEIGHTED DOLLAR INDEX (12/16) | 106.0 | 106.9 | 108.4 |

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

Data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense. nt. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

FEDERAL BUDGET

Tuesday, Dec. 21, 2 p.m. EST ▶ The Treasury is expected to report a monthly deficit of \$17.5 billion for November, according to the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. The Treasury's expected gap is about even with the November 1997 deficit. The Congressional Budget Office has projected a \$10 billion surplus for fiscal 1999, which begins in September 1999. But private analysts expect that projection to pare down to a \$5 billion surplus in January. The CBO issues a new forecast in January. The Washington Post reported a surplus of \$70 billion for fiscal 1998, the first black-ink surplus in nearly three decades.

FOMC MEETING

Tuesday, Dec. 22 ▶ The Federal Reserve Board's Open Market Committee will hold its final meeting of 1998, but almost no analyst expects a surprise holiday gift from policymakers. Almost all of the S&P MMS economists are forecasting that the target for the federal funds rate will remain at 4.75%. The Fed has cut interest rates three times since Sept. 29 in response to financial-market turmoil.

DURABLE-GOODS ORDERS

Wednesday, Dec. 23, 10 a.m. EST ▶ New orders taken by durable-goods manufacturers in November were probably unchanged from their October level, says the S&P MMS survey. Orders have been fluctuating sharply in

recent months. In October, bookings fell 2.2%, following a 1.3% gain in September. Swings in aircraft demand have caused much of the volatility.

PERSONAL INCOME

Thursday, Dec. 24, 8:30 a.m. EST ▶ Personal income probably increased by a solid 0.4% in November, the same as the advance posted in October. That's suggested by the gains in employment and weekly pay for the month. Consumer spending likely increased 0.2%. Nonauto retail sales were up 0.4% in November, but vehicle purchases were weak—and the warm weather cut into household demand for energy.

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. As listed only in tables are not included.

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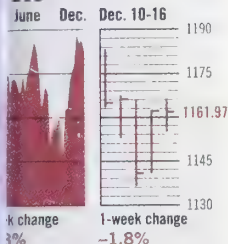
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Investment Figures of the Week

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500



SENTARY

lost ground, the result of fears of falling profits, possibility of military strikes in Iraq, and, of course, the dimming prospects of the imminent presidency of President Clinton. Low industrials dropped and the S&P 500 gave up. World markets were hit too: Japan fell 5.6%, Hong Kong 4.1%, and Brazil 12.6%. If stocks, however, continue to defy gravity. On Dec. 10, Amazon.com gained 46 points to close at 289. The reason was one analyst's prediction that the online bookseller's stock will reach 400.

| U.S. MARKETS | Latest | % change
Week | Year |
|---------------------------|--------|------------------|------|
| Dow Jones Industrials | 8790.6 | -2.4 | 10.5 |
| NASDAQ Combined Composite | 2009.4 | -2.0 | 29.9 |
| S&P MidCap 400 | 348.0 | -3.1 | 7.2 |
| S&P SmallCap 600 | 161.4 | -3.7 | -8.6 |
| S&P SuperComposite 1500 | 244.2 | -2.0 | 17.9 |

| SECTORS | Latest | % change
Week | Year |
|---------------------------|--------|------------------|------|
| Bloomberg Information Age | 435.0 | -2.1 | 50.6 |
| S&P Financials | 123.0 | -2.5 | 3.3 |
| S&P Utilities | 255.9 | 0.0 | 13.3 |
| PSE Technology | 407.0 | -3.7 | 43.6 |

| FOREIGN MARKETS | Latest | % change
Week | Year |
|-----------------------|----------|------------------|-------|
| London (FT-SE 100) | 5630.4 | -0.7 | 8.5 |
| Frankfurt (DAX) | 4663.5 | 0.0 | 12.1 |
| Tokyo (NIKKEI 225) | 14,096.3 | -5.6 | -14.8 |
| Hong Kong (Hang Seng) | 9939.4 | -4.1 | -7.0 |
| Toronto (TSE 300) | 6283.8 | -1.9 | -5.2 |
| Mexico City (IPC) | 3741.3 | -1.7 | -26.8 |

| FUNDAMENTALS | Latest | Week
ago | Year
ago |
|-----------------------------------|---------|-------------|-------------|
| S&P 500 Dividend Yield | 1.33 % | 1.31 % | 1.58 % |
| S&P 500 P/E Ratio (Last 12 mos.) | 30.1 | 30.6 | 24.3 |
| S&P 500 P/E Ratio (Next 12 mos.)* | 22.7 | 23.0 | 19.2 |
| First Call Earnings Revision* | -3.13 % | -1.81 % | -2.00 % |

| TECHNICAL INDICATORS | Latest | Week
ago | Reading |
|----------------------------------|--------|-------------|----------|
| S&P 500 200-day average | 1097.0 | 1094.2 | Positive |
| Stocks above 200-day average | 31.0 % | 35.0 % | Positive |
| Options: Put/call ratio | 0.49 | 0.45 | Negative |
| Insiders: Vickers Sell/buy ratio | 0.80 | 0.71 | Positive |

Data: Bloomberg Financial Markets; *First Call Corp.

| BEST-PERFORMING GROUPS | Last month % | Last 12 months % |
|-------------------------|--------------|---------------------------------|
| Transportation Services | 23.1 | Communications Equip. 99.2 |
| Communications Equip. | 14.9 | Drug Chains 72.8 |
| Long-Dist. Telecomms. | 14.5 | Genl. Merchandise Chains 66.0 |
| Computer Software | 13.8 | Computer Systems 65.6 |
| Instrumentation | 12.0 | Specialty Appar. Retailers 64.2 |

| WORST-PERFORMING GROUPS | Last month % | Last 12 months % |
|--------------------------|--------------|--------------------------------|
| Toys | -28.8 | Oil & Gas Drilling -56.9 |
| Savings & Loans | -13.8 | Oil-Well Equip. & Svcs. -37.7 |
| Metal & Glass Containers | -13.3 | Toys -33.8 |
| Housewares | -13.2 | Leisure Time -30.7 |
| Metals | -12.5 | Metal & Glass Containers -29.9 |

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness

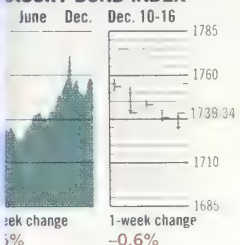
| | Price | 1-month change |
|--------------|-----------|----------------|
| Merck | 145 7/8 | -1 7/16 |
| Telebras-ADR | 78 3/8 | -6 1/8 |
| Motorola | 55 15/16 | -2 1/16 |
| Clorox | 113 15/16 | -5/16 |
| Amoco | 56 1/8 | -3 1/16 |
| J.P. Morgan | 98 13/16 | -4 1/16 |

Decline ahead? Stocks with most significant selling on price strength

| | Price | 1-month change |
|------------------|---------|----------------|
| Cisco Systems | 83 3/4 | 16 13/16 |
| Dell Computer | 65 9/16 | 2 3/8 |
| MCI WorldCom | 63 3/8 | 8 3/8 |
| Microsoft | 131 7/8 | 23 1/16 |
| Sun Microsystems | 80 1/8 | 17 5/16 |
| Schering-Plough | 54 1/4 | 3 3/32 |

REST RATES

TREASURY BOND INDEX



Data: Bloomberg Financial Markets

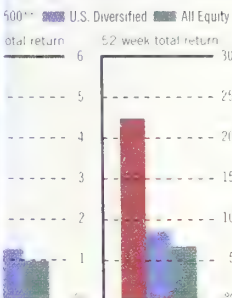
| KEY RATES | Latest
week | Week
ago | Year
ago |
|---------------------------|----------------|-------------|-------------|
| MONEY MARKET FUNDS | 4.76 | 4.77 | 5.22 |
| 90-DAY TREASURY BILLS | 4.44 | 4.43 | 5.24 |
| 6-MONTH BANK CDS | 4.38 | 4.37 | 5.21 |
| 1-YEAR TREASURY BILLS | 4.42 | 4.49 | 5.49 |
| 10-YEAR TREASURY NOTES | 4.54 | 4.60 | 5.81 |
| 30-YEAR TREASURY BONDS | 4.99 | 5.00 | 6.00 |
| LONG-TERM AA INDUSTRIALS | 6.04 | 5.96 | 6.62 |
| LONG-TERM BBB INDUSTRIALS | 6.86 | 6.85 | 6.96 |
| LONG-TERM AA TELEPHONES | 6.35 | 6.33 | 6.96 |

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

| | 10-yr. bond
Latest
week | Last
week | 30-yr. bond
Latest
week | Last
week |
|-----------------------|-------------------------------|--------------|-------------------------------|--------------|
| GENERAL OBLIGATIONS | 4.10% | 4.12% | 4.80% | 4.80% |
| PERCENT OF TREASURIES | 90.27 | 90.16 | 96.12 | 95.62 |
| TAXABLE EQUIVALENT | 5.94 | 5.97 | 6.96 | 6.96 |
| INSURED REVENUE BONDS | 4.23 | 4.23 | 5.03 | 5.03 |
| PERCENT OF TREASURIES | 93.13 | 92.56 | 100.73 | 100.21 |
| TAXABLE EQUIVALENT | 6.13 | 6.13 | 7.29 | 7.29 |

MUTUAL FUNDS



Morningstar, Inc.

EQUITY FUNDS

| Leaders | Four-week total return | % | Laggards | Four-week total return | % |
|-----------------------------|------------------------|---|------------------------------|------------------------|---|
| Matthews Korea A | 32.6 | | American Heritage | -34.0 | |
| WWW Internet | 15.5 | | Eaton Vance Wwde. Dv. Res. B | -23.1 | |
| Bridgeway Aggressive Growth | 14.0 | | ProFunds UltraShort OTC Inv. | -21.1 | |
| Potomac OTC Plus | 13.7 | | State St. Res. Glob. Res. B | -20.0 | |
| Robertson Steph. Em. Gr. A | 12.8 | | Montgomery Latin America R | -16.6 | |
| Leaders | 52-week total return | % | Laggards | 52-week total return | % |
| PorFunds UltraOTC Inv. | 138.7 | | Lexington Troika Russia | -82.3 | |
| Potomac OTC Plus | 85.2 | | American Heritage | -58.8 | |
| Dreyfus Technology Growth | 83.4 | | Eaton Vance Wwde. Dv. Res. B | -53.5 | |
| Fidelity Select Computers | 79.9 | | Montgomery Latin America R | -51.2 | |
| Munder NetNet A | 79.0 | | State St. Res. Glob. Res. B | -51.2 | |

EQUITY FUND CATEGORIES

| Leaders | Four-week total return | % | Laggards | Four-week total return | % |
|------------------|------------------------|---|----------------------------|------------------------|---|
| Technology | 9.1 | | Latin America | -10.2 | |
| Communications | 6.5 | | Natural Resources | -8.5 | |
| Large-cap Growth | 4.3 | | Precious Metals | -6.7 | |
| Mid-cap Growth | 3.0 | | Diversified Emerging Mkts. | -3.8 | |
| Japan | 3.0 | | Mid-cap Value | -1.9 | |
| Leaders | 52-week total return | % | Laggards | 52-week total return | % |
| Technology | 41.2 | | Latin America | -37.3 | |
| Communications | 34.2 | | Diversified Emerging Mkts. | -27.4 | |
| Large-cap Growth | 26.6 | | Natural Resources | -25.4 | |
| Utilities | 17.1 | | Real Estate | -14.8 | |
| Large-cap Blend | 16.5 | | Pacific/Asia ex-Japan | -12.0 | |

are as of market close Wednesday, Dec. 16, 1998, unless otherwise indicated. Industry include S&P 500 companies only. Fundamentals, technical indicators, Bloomberg mon-

ey flow analysis, and mutual fund returns are as of Dec. 15. For a more detailed explanation, write to us or E-mail figures@businessweek.com. r=revised **Vanguard Index 500 Fund

INVESTING IS NOT A SPORT

The stock market has been good to America. In recent years, it has generated enormous wealth for individuals, financing for investment, jobs for people, and tax revenue for governments. Families now depend on it for retirement, the education of their children, and, increasingly, even consumption. Millions day-trade Internet stocks, and millions more actively manage their mutual funds and 401(k)s. Soon, people may be handling Social Security investment accounts. The stock market is insinuating itself into the everyday lives of ordinary Americans as never before.

In this holiday season, as people relax with their families and plan financial strategies for 1999, it might be wise to step back and question whether we are, in fact, beginning to embrace a cult of the market. Are we as a nation becoming obsessed with the market's daily ups and downs? Is the drive to beat the market again and again motivated by sound investment criteria or a gambler's passion for instant gratification? Are we, in short, treating investment as sport, entertaining ourselves with the minutiae of the game, while neglecting the basics and ignoring the goals?

No matter what analysts, economists, or pundits tell you, the world is fundamentally unpredictable, and it is foolish to pretend that it isn't. Virtually no one foresaw the strength of either this year's economy or stock market. No one anticipated the amazing fall and remarkable recovery of the market, the Net nuttiness, the split between large caps and everything else. The Nikkei was supposed to rally. It didn't. Russia couldn't default. It did. Inflation was supposed to jump. It disappeared. Spreads were supposed to narrow. They widened. As for politics, forget it.

No wonder mutual-fund managers, by and large, under-

performed the broad Standard & Poor's 500-stock (page 154). In 1998 about 90% of diversified equity have failed to beat the S&P 500-stock index. Last year, still managed to earn a hefty 24.7% total return (incl reinvestment of dividends and capital gains) compared 33.7% for the S&P index. But in 1998, the average domestic equity fund has generated a paltry 7% return—the since 1994, when the average fund actually lost money. Even worse, if you lump in international and specialty funds, the all-equity average comes in at just 5.04%—less than what investors could have earned in the typical municipal bond fund—or even a money-market fund. That's not great performance.

A few years ago, only a small percentage of the American population—the rich—would have been affected by this longer. A quarter of households earning \$10,000 to \$20,000 now own equities, either directly or through defined-contribution pension plans such as 401(k)s. Two-thirds of all households earning \$50,000 to \$99,000 hold equities. And 84% of households earning over \$100,000 own stocks. Capital gains are an increasing component of wealth, savings spending in America.

There's the rub. The stock market now is a much more powerful force in the economic life of the U.S. Yet many continue to "play" it with abandon. Encouraged by boosterish analysts, stimulated by stock-jock TV commentators who treat the market as if it were football, and tempted by promises that fund managers can rarely keep, many investors gamble and burn. The smart ones stick with the basics: Diversify, invest for the long term. They do their homework, make their decisions—and go play ball with the kids.

THE COMING FLOOD: CHEAP IMPORTS

For 1999, price is the new paradigm. What do we mean? In 1998, the economy was defined by demand—too little of it in Asia, but plenty in the U.S. and Europe. For the year ahead, supply will play a key—perhaps a critical—role. Brace yourselves for a flood of dirt-cheap manufactured goods flowing out of Asia. Consumers should love it; companies already facing pricing pressures will hate it.

One of the great paradoxes of '98 was that even though Korea, Thailand, Taiwan, and Indonesia sharply devalued their currencies, they couldn't capitalize on their new competitiveness. The financial crisis was so severe that local banks were not able to extend letters of credit for exports. Asian banks are now recovering. And remember all that talk of a global glut and overcapacity? Well, it's still there. Very little in the way of consolidation has occurred in Asia, and enormous factories for electronics, chips, steel, autos, chemicals, clothes—you name it—are just beginning to rev up,

pumping out goods again. The quantity is enormous, and the price is, well, cheap. Manufactured goods are the new commodities. The analogy is oil and coal.

Governments throughout Asia are making tremendous efforts to cut costs even further. Singapore's Committee on Competitiveness, a joint government and business group, has recommended a 15% reduction in total wage costs. In all, it will be equal to 7% of Singapore's gross domestic product. Hong Kong is urging workers to take 5% wage cuts. Thailand has urged manufacturers and merchants to cut prices on 18 categories of goods. All in all, prices are falling sharply all over Asia. (Wholesale price indexes for both Japan and Taiwan were down at a 13% annual rate last quarter from the year before.) Cheaply priced goods will wash up on U.S. shores shortly.

This is the new world of deflation. Prices will fall. Profits will be squeezed. The corporate game will be boosting margins. Welcome to 1999.



*Go confidently in the direction of your dreams.
Live the life you've imagined.*

—Henry David Thoreau

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AN IDEA SO GOOD,
IT MADE
A MILLION
LIGHTBULBS GO ON.





